The Limitations of the Educational Theory of John Locke Especially for the Christian Teacher

BY

SISTER MARY LOUISE CUFF, M. A.
of the Sisters of St. Joseph, Concordia, Kansas

A DISSERTATION

Submitted to the Catholic Sisters College of the Catholic University of America in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

WASHINGTON, D. C.
JUNE, 1920

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PREFACE

Students and admirers of the educational theory of John Locke have long recognized its very marked limitations. Later educators like Herbert Spencer have occasionally singled out some of them for drastic treatment, but the points chosen for criticism have referred for the most part to special phases of his theory. Locke's striking views on the physical care of the child were quickly seen to be of limited power of application, but the principles and methods which he proposed for the moral and intellectual training of the child have not been as often nor as thoroughly examined.

The purpose of this dissertation is to expound Locke's theory in all its important aspects and to criticize it in the light of modern educational science, indicating what are its limitations on the physical, intellectual and moral side and from the Christian viewpoint. Although the writer has been solicitous to show how impossible it is for the Christian teacher to be content with what Locke offers, yet she has not lost her admiration for the noble endeavor of the philosopher to secure for those for whom he wrote an education that would be at least a training, a discipline, and a fit preparation for life's demands.

The writer acknowledges her indebtedness to her professors in the Catholic University of America, especially Doctors McCormick, Shields, Pace, Healy and the Rt. Rev. William Turner, D.D., now Bishop of Buffalo, under whom she pursued her graduate studies. She also expresses her gratitude for valuable assistance and courtesies extended by the Librarians of the Catholic University of America and the United States Bureau of Education.

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CHAPTER I

ANALYSIS AND SUMMARY OF LOCKE'S ESSAY ON EDUCATION

Life.—John Locke was born August 29, 1632, at Wrington, near Bristol, England. He was not blessed with robust health the greater part of his life, and yet he reached the age of 72. He died October 27, 1704. Little is known of his early years.

In 1646, he was sent to Westminster School. Having completed his course, he won a Junior Studentship at Christ College, Oxford. He got his Bachelor's degree, February 14, 1655, and his Master's degree, June 28, 1658.[1]

In 1666, while at Oxford, he was incidentally introduced to Lord Ashley, afterwards Earl of Shaftesbury, who was so impressed by Locke's scholarly attainments as well as by his character as a man, that he resolved to attach him to his household as friend and physician. In the latter capacity, Locke seemed to have acquitted himself of his duties with marked success, for Lord Shaftesbury states positively that he was indebted for his life to him.[2] His success as a physician undoubtedly served to increase the confidence and esteem of the family, and, as a result, Locke was intrusted with the education of the son, and later with that of the grandson, the third Earl of Shaftesbury. This was Locke's first experience as teacher. It is said that "the second Lord Shaftesbury turned out a stronger man in body than was expected, but Locke's hardening system was not tried upon him as a child; and he was married while still a youth. In this case Locke secured at best only one of his

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[1]Cf. Fox-Bourne, Life of Locke, Vol. I, p. 53.
[2]Vide Fox-Bourne, op. cit., p. 200.

desiderata: the *mens sana* was wanting in *corpore sano.*"[3]

In the beginning of 1677, Shaftesbury wrote to Locke, who had gone to France to retrieve his health, requesting him to look after the education of the son of Sir John Banks. Locke immediately went to Paris from Montpelier and took charge of this pupil. We have hardly any particulars about his tutorship in this instance, save that it lasted nearly two years, and that Locke found his new pupil old enough to begin mathematics, but ignorant, as yet, of the elements of logic, which he conceived a necessary preliminary to the study of mathematics; for he says, "to engage one in mathematics, who is not yet acquainted with the very rudiments of logic, is a method of study I have not known practised, and seems to me not very reasonable."[4]

In 1679, after a tour through France with his pupil, Locke was recalled by Shaftesbury to resume his functions in the latter's household. Apart from the private and public affairs that Locke had to busy himself with on his return to England, there was that which lay close to the heart of old Shaftesbury, and that was the education of his grandson. The child was only three years old, but the father was persuaded to give him up entirely, and, from that time till the flight and death of the grandfather, the child was brought up under Locke's direction.

In his *Characteristics,* the third Earl of Shaftesbury gives us the following account of his tutor's introduction into the family and of his subsequent educational activities there. He writes: "When Mr. Locke first came into the family, my father was a youth of about 15 or 16. Him, my grandfather intrusted wholly to Mr. Locke for what remained of his education. He was an only child, and of no firm health, which induced my grandfather, in

[3] Quick's Edition of *Thoughts,* p. XXVIII.
[4] *Vide* Fox-Bourne, op. cit., p. 378.

concern for his family, to think of marrying him as soon as possible.'"[5] "In our education, Mr. Locke governed according to his own principles, since published by him, and with such success that we all of us came to full years with strong, healthy constitutions—my own the worst, though never faulty till of late. I was his peculiar charge, being as eldest son taken by my grandfather and bred under his immediate care, Mr. Locke having absolute direction of my education, and to whom, next my immediate parents, as I must owe the greatest obligation, as I have ever preserved the highest gratitude and duty.'"[6]

Locke's next experiment as a tutor, brings us, though not directly, to the origin of *Thoughts on Education.* Mr. Edward Clarke, of Chipley, a close friend of the author, was very anxious to get advice about the bringing up of his son, and hence wrote to him for guidance. In reply, Locke, who was then in Holland, wrote a series of letters, which he published upon his return to England four years later. "The work," says Quick, "was a favorite one with him; and he kept adding to it as long as he lived. But as a literary work it suffered much from being composed in this irregular and patchwork fashion. The sentences are often carelessly constructed; and as short as the book is, it contains a good deal of tiresome repetition. But when a mind like Locke's applies itself to an important subject, all men are interested in the result; and the *Thoughts Concerning Education* has been hitherto the salutary English classic in Pedagogy.'"[7]

In 1689, Locke took up his residence with Lady Masham, at Oates. Here an excellent opportunity presented itself to arouse his interest in a new experiment in education. In the family were Lady Masham's stepdaughter Esther, a girl of sixteen, and her own son

[5] Fox-Bourne, op. cit., Vol. I, p. 203.
[6] Ibid., p. 424.
[7] Op. cit., p. XXXVI.

Frank, a child between four and five. Frank Masham was brought up according to Locke's hardening system, with the best result. Locke was no mere theorizer of the study and library. He delighted in bringing new notions in contact with experience. Even when an exile in Holland, he took so much interest in the little son of a Quaker merchant of Rotterdam, that in after years the young man, Arent Furley by name, is spoken of by the third Earl of Shaftesbury as "a kind of foster-child to Mr. Locke."

To this period also belongs the friendship with Mr. Molyneux, of Dublin, Ireland. The correspondence between them was opened by Locke in July, 1692. In the following year, Molyneux urged him to publish his *Thoughts*. "My brother," writes Molyneux, "has sometimes told me that whilst he had the happiness of your acquaintance at Leyden you were upon a work on the method of learning, and that too, at the request of a tender father for the use of his only son. Wherefore, good sir, let me most earnestly entreat you by no means to lay aside this infinitely useful work till you have finished it, for 'twill be of vast advantage to all mankind as well as particularly to me your friend. . . . There could nothing be more acceptable to me than the hopes thereof (the work), and that on this account: I have but one child in the world, who is now nigh four years old and promises well. His mother left him to me very young, and my affections (I must confess) are strongly placed in him. It has pleased God by the liberal provision of our ancestors to free me from the taking care of providing a fortune for him, so that my whole study shall be to lay up a treasure of knowledge in his mind for his happiness both in this life and the next. And I have been often thinking of some method for his instruction that may best obtain the end I purpose. And now, to my

great joy, I hope to be abundantly supplied by your method."[8]

This book was to expose the error so commonly entertained that "a treasure of knowledge in the mind" was the main thing to be achieved in education. And three weeks later, March 28, 1693, Locke informs his friend that the work was gone to the printer at his instance. He writes: "That which your brother tells you on this occasion, is not wholly beside the matter. The main of what I now publish, is but what was contained in several letters to a friend of mine, the greatest part whereof were writ out of Holland. How your brother came to know of it I had clearly forgot, and do not remember that I ever communicated it to anybody there. These letters, or at least some of them, have been seen by some of my acquaintances here, who would needs persuade me 'twould be of use to publish them. Your impatience to see them has not, I assure you, slackened my hand or kept me in suspense. I know not yet whether I shall set my name to this discourse, and, therefore, shall desire you to conceal it."[9]

Locke requested his friend to give him his unbiased opinion, and, accordingly, in the next letter, Molyneux takes exception to his rule that "children should not have what they ask for, still less what they cry for." Naturally, Locke, like most people who ask for criticism, was somewhat irritated. He defends all he has written, and makes the most of inaccuracies in the critic's account of it. Molyneux accepts the explanation offered, but his objection induces Locke to explain his views on the point at greater length in the second edition.

Shields agrees with Locke in not satisfying the humors of the child. "The easiest solution of many of

[8] Letter to Locke, March 2, 1693, Fox-Bourne, op. cit., Vol. II, p. 254.
[9] Locke to Molyneux, March 28, 1693, Fox-Bourne, op. cit., Vol. II, p. 255.

the difficulties presented in the school," pertinently observes he, "is to be found in a ready yielding to the child's humors and tendencies. Permit him to follow his bent without interferences—we are told. Yield wholly to nature. Such a procedure, however, constitutes a practical abandonment of the essential work of education. Whether or not such a procedure is to be permitted in a Kindergarten or a Montessori House of Childhood, it is clearly out of place in the elementary school. To permit the child to follow his own impulses without restraint, to follow his own tendencies and ideas without any guidance from authority, to allow him to pass through the plastic period of his life without having adjusted himself to objective standards of authority, and without having acquired habits of obedience to the laws which regulate human conduct in civilized society constitutes a betrayal of the trust reposed in the school."[10]

In the Molyneux correspondence there is much about education. In trying to carry out Locke's scheme, Molyneux naturally found some difficulty in securing the model tutor. He writes to his friend to help, and holds out a fair prospect. However, Molyneux engaged a tutor. Locke was curious to learn how the experiment succeeded, and he was pleased by good reports. On July 2, 1695, he wrote to Molyneux, stating that he was glad to hear of the splendid results of his method. He asks for further particulars and hopes to learn that his method of teaching Latin proved successful.

Molyneux replied by entering into details, and seems jubilant over the progress of his son in the different branches. He concludes his letter, thus: "And as to the formation of his mind, which you rightly observe to be the most valuable part of education, I do not believe that any child had ever his passions more perfectly at com-

[10]Philosophy of Education, p. 190.

mand. He is obedient and observant to the nicest particular, and at the same time uprightly, playful and active."[11]

Having given practical study to the subject of education through his life, Locke had a good right now to propound his views to the world. And notwithstanding some blemishes and eccentricities, his plan was a wonderfully sensible one. Not the least of recommendation is, that the crafts of the doctor and the teacher were combined. We have seen in his own case . . . how eager the old pedagogues were for certain sorts of intellectual training; but the physical education was before this time almost a thing unknown. Locke had clear notions of his own, which he advanced very boldly, as to the sort of pedagogic work that was most proper for duly developing children's minds; but he was yet bolder in his insistence on the necessity of looking after their bodies if their minds were to be trained in any useful way.[12]

"Among the writers on education and inventors of new methods, there are only two Englishmen who have a European celebrity—Locke and Hamilton. The latter of these did, in fact, little more than carry out a suggestion of the former, so that almost all the influence which England has had on the theory of education, must be attributed to Locke alone. Locke's authority on this subject has indeed been due chiefly to his fame as a philosopher. His 'Thoughts on Education,' had they proceeded from an unknown author, would probably have never gained him a reputation even in his native country; and yet, when we read them as the work of the philosopher, we feel that they are not unworthy of him. He was no enthusiast, conscious of a mission to renovate the human race by some grand educational discovery; but as a man of calm, good sense, who found himself encharged

[11]Molyneux to Locke, August 20, 1695, Fox-Bourne, op. cit., p. 268.
[12]Fox-Bourne, Life of Locke, Vol. II, p. 256.

with the bringing up of young noblemen, he examined the ordinary education of the day, and when unsatisfactory, he set about such alterations as seemed expedient. His *Thoughts* were written for the advice of a friend, and, as we may infer from the title, are not intended as a complete treatise. The book, however, has placed its author in the first rank of those innovators whose innovations, after a struggle of two hundred years, have not been adopted, and yet seem now more than ever likely to make their way."[13]

We have briefly sketched Locke's experience in education. We noticed that he was interested in the practical outcome of his theory, as his correspondence with Molyneux testifies. We will now proceed with the analysis of the *Thoughts Concerning Education,* and consider them under the captions of (1) Physical Training, (2) Moral Training, and (3) Intellectual Training.

1

Physical Training

"A sound mind in a sound body, is a short, but full description of a happy state in this world; he that has these two, has little more to wish for; and he that wants either of them, will be but little the better for anything else." In these opening words, Locke sums up what he considers the aim and end of education. He has strong views of his own as to the means and methods whereby the ultimate goal is to be reached, and he urges them, not with the enthusiasm and eagerness of a reformer, but with the steady purpose and wise moderation of a genuine friend of youth.

Being a physician, and, combined with the fact that nature had provided him with a frail physique, it seems quite natural that Locke should have devoted his first attentions to the body, not as if that should be our main

[13]Quick, John Locke, Syracuse, 1886.

care, but "that it (the body) may be able to obey and execute the orders of the mind,"[14] and because health is necessary to our business and happiness. "How necessary," he says, "health is to our business and happiness; and how requisite a strong constitution, able to endure hardships and fatigue, is, to one that will make any figure in the world; is too obvious to need any proof."[15]

In order to make the body strong and vigorous, we must give nature full scope of action to fashion and develop it. In the event even of the slighter indisposition, he would, "leave children wholly to nature," rather than put them "into the hands of one forward to tamper." "It seems suitable both to my reason and experience," he says, "that the tender constitutions of children should have as little done to them as is possible and as the absolute necessity of the case requires."[16]

He warns parents not to spoil the constitution of their children by "cockering and tenderness." The strength and vigor of the body depend chiefly on the ability to bear the hardships and vicissitudes that are met with in the ordinary course of life, and they (the bodies) "will endure anything, that from the beginning they are accustomed." Hence, children should be accustomed by slow degrees to endure changes of temperature and not be clothed too warmly, winter or summer. He would have their shoes so thin as to leak water, whenever they get near it, and have them bathe their feet and limbs in cold water, every day of the year, not merely for cleanliness, but as means of invigorating the whole body. To encourage the use of cold water generally, Locke holds before us the examples of Seneca and Horace, and advises timid mothers to "examine what the Germans of old, and the Irish now, do to them (their in-

[14] *Thoughts*, Sec. 31.
[15] Sec. 3.
[16] Sec. 31.

fants)." Swimming, too, is recommended, not only because the skill, thus acquired, may serve in time of need, but also because of the advantages the health will derive from bathing in cold water. This is his idea of hardening.

Physicians universally agree with Locke in his decisive stand against the folly of "strait-lacing," and the meddling in this matter on the part of those who understand not, who should be "afraid to put nature out of her way in fashioning the parts, when they know not how the least and meanest is made."[17] "If women," he says, "were themselves to frame the bodies of their children in their wombs, as often as they endeavor to mend their shapes when they are out, we should as certainly have no perfect children born, as we have few well-shaped that are *straight-laced*, or much tampered with."[18] The physiological disorders which Locke points out, as resulting from the temporary or permanent displacement of the bodily organs ought to be sufficient warning to the thoughtful.

On the question of diet, Locke insists very minutely, and, at great length, upon simplicity and frugality. Meat should be given sparingly to children, highly spiced viands, and all stimulating food and drinks are to be avoided with care, because they heat the blood and rouse the dormant passions. The demands of hunger and thirst as well as all cravings of the bodily appetites are to be controlled by prudent reason; and, while children are still too young to exercise proper caution and moderation, it is the duty of parents to watch over them with the greatest solicitude. Children must never be given anything simply because they desire vehemently, and refusal should be the invariable consequence of insistent demanding; but whatever they need, or is good for

[17] Sec. 11.
[18] Sec. 11.

them, should be provided with great kindness, without allowing them to ask for it.

All through the *Thoughts,* there is ample proof that Locke's strenuous methods do not proceed from a harsh and unsympathetic nature, but rather from an intelligent appreciation of the real, as distinguished from the apparent, good. The kindly attitude of Locke is aptly illustrated by what he says about sleep. "Of all that looks soft and effeminate, nothing is more to be indulged children, than *sleep.* In this alone they are to be permitted to have their full satisfaction; nothing contributing more to the growth and health of children, than sleep. All that is to be regulated in it is, in what part of the twenty-four hours they should take it."[19] And again, "Great care should be taken in waking them, that it be not done hastily, nor with a loud or shrill voice, or any other sudden noise. This often frightens children, and does them great harm, and sound sleep thus broken off, with sudden alarm, is apt to discompose anyone. When children are to be awakened out of their sleep, be sure to begin with a low call, and some gentle motion, and so draw them out of it by degrees, and give them none but kind words and usage, till they are come perfectly to themselves, and being quite dressed, you are sure they are awake. The being forced from their sleep, how gently soever you do it, is pain enough to them; and care should be taken not to add any other uneasiness to it, especially such that terrifies them."[20] Were there no other passage of a similar nature in his *Thoughts,* this alone would suffice to show that, though Locke considers the education of the child, the business of the head rather than of the heart, there can and should be in it a motherly tenderness and solicitude as regards everything that affects the well-being of youth.

[19]Sec. 21.
[20]Sec. 11.

If he demands what is disagreeable or even painful to human nature, it is not in the belief that pain is good in itself, but in the conviction that obedience to the laws of our physical being, like obedience to the laws of our moral nature, demands self-restraint and self-denial.

Locke summarizes his remarks on the care of the body in these brief words: "Plenty of open air, exercise and sleep, plain diet, no wine or strong drink, and very little or no physic, not too warm or straight clothing, especially the head and feet kept cold, and the feet often used to cold water, and exposed to wet."[21]

2

Moral Training

Locke founds all virtue and moral power in this, "That a man is able to deny himself his own desires, cross his own inclinations, and purely follow what reason directs as best, though the appetite lean the other way."[22] "He that has not a mastery over his inclinations, he that knows not how to resist the importunity of present pleasure or pain, for the sake of what reason tells him is fit to be done, wants the true principle of virtue and industry, and is in danger never to be good for anything."[23]

This power of conducting ourselves according to the dictates of reason is not to be obtained by multiplying rules and precepts of good behavior. The fewer of these we trouble children with, the better. "Whatever you think necessary for them to do," he says, "settle in them by an indispensable practice, as often as occasion returns; and if it be possible make occasions. This will beget habits in them, which being once established, operate of themselves easily and naturally, without the assis-

[21] Sec. 20.
[22] Sec. 33.
[23] Sec. 45.

tance of the memory."[24] This practice should begin from the very cradle and the habit of it wrought into the mind with the first awakening of conscious life. "The first thing they should learn to know, should be, that they were not to have anything, because it pleased them, but because it was thought fit for them."[25]

Locke is very emphatic in cautioning parents to let reason guide their natural affection for their little ones, lest love degenerate into a foolish fondness which blinds them to the child's real well-being. It is, indeed, a duty to love their children, but the danger is that together with the child they love his faults. While still in his infancy, his sallies of ill-temper are indulged, small irregularities, slight tricks of a perverse nature, because the child is still incapable of great faults, and these little transgressions are deemed becoming to his age. Aye, parents often go further and lend encouragement to such manifestations of disorderly tendencies by making them the object of amusement, little thinking that they thus "corrupt the principles of nature in their children."[26]

Later on "when their children are grown up, and the ill habits with them; when they are now too big to be dandled, and their parents can no longer make use of them as playthings, then they complain that the brats are untoward and perverse; then they are offended to see them willful, and are troubled with those ill humors which they themselves infused and fomented in them; and then perhaps too late."[27] And that is not to be wondered at. "Why must he at seven, fourteen, or twenty years old lose the privilege, which his parents' indulgence, till then, so largely allowed him? Try it in a dog or an horse or any other creature, whether the ill and

[24]Sec. 66.
[25]Sec. 38.
[26]Sec. 35.
[27]Sec. 35.

resty tricks they have learned when young are easily to be mended when they are knit; and yet none of those creatures are half so willful and proud, or hold so desirous to be masters of themselves and others, as man."[28]

This sound admonition should be deeply engraven upon the mind of every parent. Teachers are compelled to spend too large a percentage of their energies in mending the defects of early home training, and, as a general rule, the results are not commensurate with the efforts.

Locke is as much opposed to an excessive rigor, which breaks the spirit of the child, as he dreads the indolent and slothful weakness that allows unruly dispositions and perverse tendencies to grow into the very fibre of the young. "Dejected minds, timorous and tame, and low spirits, are hardly ever to be raised, and very seldom attain to anything."[29] Locke wants children to be children at all times, easy, active, free; nor are we to trouble ourselves about faults which age will cure. "The gamesome humor, which is wisely adapted by nature to their age and temper, should rather be encouraged to keep up their spirits and to improve their strength and health, than curbed and restrained; and the chief art is to make all that they have to do, sport and play too."[30] "He that has found a way," he adds, "to keep up a child's spirit easy, active, and free; and yet, at the same time, to restrain him from many things he has a mind to, and to draw him to things that are uneasy to him; he, I say, that knows how to reconcile these seeming contradictions has, in my opinion, got the true secret of education."[31]

Rewards and punishments are needed to hold children in the path of duty, but these must be chosen wisely, if they are to produce the desired result. The pains and pleasures of the body are but ill-adapted for this pur-

[28] Sec. 35.
[29] Sec. 46.
[30] Sec. 63.
[31] Sec. 46.

pose, because such rewards and punishments do but strengthen those inclinations and appetites that moral training strives to subdue, so that the will may be controlled by reason only despite and not because of the fear of pain or the craving after pleasure. "Esteem and disgrace are, of all others, the most powerful incentives to the mind, when once it is brought to relish them. If you can once get into children the love of credit, and apprehension of shame and disgrace, you have put into them the true principle which will constantly work and incline them to the right."[32]

A child should never be flogged, save for stubborn disobedience to specific commands. However, such authoritative commands must rarely be used and only when they cannot be dispensed with; but once given, such orders, even in trivial matters, must be obeyed at all cost, if the child is not to be ruined permanently. And when such severe punishment is employed, it ought to be given in such a way as to arouse the sense of shame in him who has made such chastisement necessary.

Since virtuous conduct and right human life demand obedience to the dictates of right reason, it is all important to set the child's mind aright from the earliest dawn of reason. Locke would have a father seldom interpose his authority and command, save where necessary to curb vicious tendencies. Children can, in a measure, understand the why of things as early as they understand language and "they love to be treated as rational creatures sooner than is imagined."[33] The father should, therefore, strive to make his son understand the fitness and reasonableness of things that are demanded of him. "Nobody indeed can think a boy of three or seven years old should be argued with as a grown man" . . . "When I say that they (children) must be treated as rational creatures, I mean that you should make them sensible,

[32]Sec. 56.
[33]Sec. 81.

by the mildness of your carriage, and the composure, even in your correction of them, that what you do is reasonable in you, and useful and necessary for them; and that it is not out of caprice, passion, or fancy, that you command or forbid them anything. This they are capable of understanding; and there is no virtue they should be excited to, nor fault they should be kept from, which I do not think they may be convinced of; but it must be by such reasons as their age and understanding are capable of, and those proposed always in very few and plain words."[34]

In this Locke is borne out by reason and experience. That conduct may be good and virtuous, it must be apprehended as such by the intellect and deliberately willed by the individual. The constant reference to parental authority may be the easiest method of ensuring good behavior for the time being; but unless the conscience be carefully educated from the earliest years, what will direct the grown child in the path of duty, when in later years his intimate relations with parental and school authority no longer hold sway?

When undisturbed by emotion or passion, children are as amenable to the sound reason of things as are their elders, and it is the business of the parent and of the educator to know how these young minds can be reached. Since there are neither prejudices nor strong passions to obstruct the way, truth, if presented in the proper garb, finds a ready access into the minds of children and produces a stronger and more lasting impulse toward the good than can ever be expected from the fear of present punishment, or the hope of the ordinary rewards held out to them. If, withal, the young fall short of duty, it is usually because of the lack of sufficient will power to carry out a good resolve, and it is here where the steady purpose of parent and educator must come to the rescue. A calm, peaceable insistence on what

[34] Sec. 81.

has been determined as proper, is to the young like a bracing atmosphere in which their young wills gather power and purpose.

But since children understand what they see much better than what they hear, the most potent and persuasive lesson of right conduct must be given them by the example of those about them. It is on this important question of proper environment that Locke bases his opposition to a grammar school in favor of a private education under the direction of a carefully chosen tutor. He acknowledges that a private education has indeed its own difficulties, but its advantages so far outweigh the inconveniences and disadvantages connected with it, that Locke urges parents not to hesitate in the choice, saying: "I think it is the worst of good husbandry for a father not to strain himself a little for his son's breeding; which, let his condition be what it will, is the best portion he can leave him."[35] He argues that in a large school the teachers exert less influence upon the mind and character of the child than do the example and conversation of his companions. "Not that I blame the schoolmaster in this, or think it is to be laid to his charge. The difference is great between two or three pupils in the same house and three or four score boys lodged up and down; for let the master's industry and skill be ever so great, it is impossible that he should have fifty or a hundred scholars under his eye any longer than they are in school together; nor can it be expected that he should instruct them successfully in anything but their books; the forming of their minds and manners requiring a constant attention and particular application to every single boy, which is impossible in a numerous flock, and would be wholly in vain (could he have the time to study and correct everyone's peculiar defects and wrong inclinations), when the lad was left to himself, or the prevailing infection of his fellows the greatest

[35] Sec. 70.

part of the four-and-twenty hours." . . . "Till you can find a school, wherein it is possible for a master to look after the manners of his scholars, and can show as great effects of his care of forming their minds to virtue, and their carriage to good breeding, as of forming their tongues to the learned languages, you must confess, that you have a strange value for words, when preferring the languages of the ancient Greeks and Romans to that which made them such brave men, you think it worth while to hazard your son's innocence and virtue for a little Greek and Latin."[36]

Virtue, Locke rightly asserts, is not only more important in life than knowledge, but likewise more difficult of acquisition; and, if lost in a young man is seldom recovered. He does not deny that learning and a knowledge of the world are obtained with greater facility at school, and that a private education is liable to produce a "sheepish softness" of temper, which makes the young too susceptible of vicious impression. He cautions, therefore, to fortify a young man with good resolutions and to make him acquainted with men of the best quality, before he ventures into company of his own seeking. Were it not for the danger of yielding to the forwardness that usually accompanies vice, there would be but little necessity of an early care about this bashfulness and ignorance of worldly ways. "If pains be taken to give him a manly air and assurance betimes, it is chiefly as a fence to his virtue, when he goes into the world, under his own conduct."[37]

A knowledge of the true state of the world, of its dangers and pitfalls is necessary to bridge the span that separates boyhood from manhood. "The only fence against the world is a thorough knowledge of it: into which a young gentleman should be entered by degrees, as he can bear it; and the earlier the better, so he be

[36] Sec. 70.
[37] Sec. 70.

in safe and skillful hands to guide him. The scene should be gently opened, and his entrance made step by step, and the dangers pointed out that attend him, from the several degrees, tempers, designs, and clubs of men."[38]

Locke realizes the danger of thus teaching vice to the young and hence urges great discretion in him who undertakes this particular line of instruction, and demands that account be taken of the temper, inclinations, and weak side of the pupil.

If we now come to consider the particular virtues that Locke deems most important to his young gentleman and the sanction he places thereon, we find that he emphasizes the social virtues and the social side of virtue. He takes cognizance of the supernatural sanction of virtue and right conduct by referring them to God, "the independent Being, Author, and Maker of all things, from whom we receive all our good, who loves us, and gives us all things."[39] This simple notion of God, Locke considers sufficient positive instruction to serve as a religious basis of morality. He would depend on the child forming to himself additional notions, "which, as you observe them to have any mistakes, you must set right."[40] A remarkable statement coming from one who, in other matters, attributes everything to education and so little to untutored nature. He believes that "the keeping of children constantly, morning and evening, to acts of devotion to God, as to their Maker, Preserver and Benefactor, in some simple and short form of prayer, suitable to their age and capacity, will be of much more use to them in religion, knowledge and virtue, than to distract their minds with curious inquiries into His inscrutable essence and being."[41]

This is well enough as far as it goes, but seems very meagre when compared with the pains Locke takes to

[38]Sec. 94.
[39]Sec. 136.
[40]Sec. 136.
[41]Sec. 136.

establish the purely rational, social, and utilitarian side of virtue. In theory he does, indeed, refer to the Divine sanction of virtue, but in urging its practice he is tireless in recurring again and again to the fact that he regards virtue as "the first and most necessary of those endowments that belong to a man or a gentleman, as absolutely requisite to make him valued and beloved by others, acceptable or tolerate to himself;"[42] that lying is "as wholly inconsistent with the name and character of a gentleman, that nobody of any credit can bear the imputation of a lie;" that lying is a "mark that is judged the utmost disgrace, which debases a man to the lowest degree of shameful meanness, and ranks him with the most contemptible part of mankind, and the abhorred rascality; and is not to be endured in anyone, who would converse with people of condition, or have any esteem or reputation in the world;"[43] that children should be made to "find by experience, that the most liberal has always most plenty, with esteem and commendation to boot."[44] He insists on the inculcation of reverence, because it is necessary in order to establish and maintain parental authority.[45] He values breeding, and all those virtues comprehended in that term, as that "which sets a gloss upon all his other good qualities, and renders them useful to him, in procuring him the esteem and good will of all that he comes near." . . . "There cannot be a good quality in him, which want of breeding will not warp, and disfigure to his disadvantage. Nay virtue and parts, though they are allowed their due consideration, yet are not enough to procure a man a good reception, and make him welcome wherever he comes." Solidity, or *even* usefulness, is not enough. "In most cases, the manner of doing is of more consequence than

[42] Sec. 135.
[43] Sec. 131.
[44] Sec. 11.
[45] Sec. 93.

the thing done; and upon that depends the satisfaction, or disgust, wherewith it is received."[46]

What other motives are here set forth but such as are ultimately egotistic and utilitarian? And, when he says that "the great principle and foundation of all virtue and worth" lies in a man's ability to deny himself in order that he may "purely follow what reason directs as best,"[47] he does not reach beyond a rationalistic standard of morality. He seems to be totally ignorant of Christian teaching on the value and necessity of actual grace, when he asserts, "that the *only* fence against the world is a thorough knowledge of it."[48]

Locke's teachings on moral training may be summed up as follows: The principle of all virtue and right conduct lies in this, that a man be able to ignore his passions and bodily appetites and bring all his actions under the control of a will guided by reason only. The habit of it, which has grown into his very fibre and has become a second nature, is the only thing that can make this masterful sway of reason sure and permanent. The formation of this habit must begin from the very cradle. While the child is, as yet, unconscious of any purpose, the carrying out of this scheme of rational control devolves upon the parent; but, as soon as reason awakens, the whole plan and method should be unfolded to him by degrees and as far as his understanding will permit, so that this rational control may develop into self-control in the true sense. If the child does anything wrong correct him by having him to do the act aright repeatedly, in the manner in which a music teacher corrects his pupil by making him repeat the difficult passage. Rewards and punishments that appeal to the child's sense of honor and disgrace, to his love of esteem and commendation, are helpful and even necessary stimuli. A multiplicity

[46]Sec. 33.
[47]Sec. 33.
[48]Sec. 94.

of rules serve but to confuse the child. Example is the most persuasive argument: it is an object lesson that illustrates principles and speaks with the convincing eloquence of sincerity. For this reason, the quality of the child's company is a dominating educational factor which should be absolutely controlled. A private education, under immediate parental supervision, so effectually controls this all-important environmental factor that its difficulties and inconveniences may well be disregarded. Undoubtedly, the greatest care must be exercised in finding a suitable tutor, one who is above everything else a man of virtue and good breeding. Truthfulness, wisdom, justice, honor, liberality, courage, self-restraint, kindness, and all the qualities implied in good breeding, are the virtues Locke wishes to inculcate into his "young gentleman."

He does, indeed, at least in theory, recognize the Divine sanction of virtue, but, practically, all the efforts of the philosopher focus on the aim of developing in his pupil those virtues that will lift him above and set him apart from the "abhorred rascality." Locke's aim falls short of the lofty ideal of the Christian teacher, who strives at nothing less than bringing into clear relief the image of the Divinity, the outlines of which are traced by its Maker upon the soul of his young disciple. His standard of morality is rationalistic, with a naturalistic religious basis thrust into the distant background, whereas his motive of virtue is purely egotistic or utilitarian.

3

Intellectual Training

When examining Locke's *Thoughts on Education*, we should bear in mind two things: (1) The author had no intention of writing a pedagogy for the education of the children of the people; nor had he in mind the needs of those who are preparing themselves for any of the

learned professions. He states explicitly[49] that his letters were intended to be a directory for the education of a young gentleman and were originally written in compliance with the request of a solicitous father, anxious for the proper bringing up of his son. (2) Locke's directions were primarily intended for the individual method of private instruction, and are, therefore, not always applicable to the simultaneous teaching of a large number of pupils in a classroom.

The outstanding feature of the *Thoughts* is Locke's complete disapproval of the prevailing system of education, as to both matter and method. His original and independent mind grew impatient at the intellectual inertia with which the schools of his time clung to a curriculum and a method, well enough adapted to the needs of the time whence they sprang, but which had now little to commend them, save their antiquity, which the many, unfortunately, regarded as sufficient reason for their continuance.

His most emphatic disapproval falls upon the custom of overcrowding the curriculum with the classical languages, especially Latin, as if the acquisition of one or two dead languages, were not only the most important, but in reality the only necessary as well as all-sufficient requisite for an education. For this mania to which the young are made to sacrifice seven or eight of the best years of their young lives, Locke finds no explanation, except that custom is taken as sufficient reason for the doing.

He does not, indeed, question the real value, beauty, and importance of Greek and Latin literature, but condemns the indiscriminate crowding of the educational program with Latin grammar, Latin dictation, Latin themes, Latin versification, and the endless memorizations of lengthy selections, to the neglect of that which

[49]Sec. 217.

is of more importance, not only for a gentleman in whose behalf he writes, but especially for the large majority of those who are destined for trade or a business life. He argues for the cultivation of the mother tongue. He realized that the intensive and extensive cultivation of the classical languages in the schools and universities was largely responsible for the retarded development of the vernacular in his own as well as in other countries. He points out that the structure and genius of the Latin is so radically different from that of the English tongue, that to be perfect in the former would help very little to improve the purity and facility of the student's English style.[50] He lauds the steps taken by "some of our neighbors" to promote and improve their own language, and acknowledges the notable results achieved in the matter. The Romans themselves, whose culture and civilization we admire so much, cultivated their own, not foreign tongues. "And though the Greek learning grew in credit among the Romans, towards the end of their Commonwealth, yet it was the *Roman* tongue that was made the study of their youth: Their own language they were instructed and exercised in."[51] "The great men among the Romans were daily exercising themselves in their own language; and we find yet upon record the names of orators, who taught some of their emperors *Latin,* though it were their mother tongue."[52] " 'Tis plain the Greeks were yet more nice in theirs. All other speech was barbarous to them but their own and no foreign language appears to have been studied or valued amongst that learned and acute people; though it be past doubt that they borrowed their learning and philosophy from abroad."[53]

"Since it is English that an Englishman will have

[50]Sec. 172.
[51]Sec. 168.
[52]Sec. 189.
[53]Sec. 189.

constant use of, that is the language he should chiefly cultivate, and wherein most care should be taken to polish and perfect his style. To speak or write better Latin than English may make a man talked of, but he would find it more to his purpose to express himself well in his own tongue, that he uses every moment, than to have the vain commendation of others for a very insignificant quality. This I find universally neglected, and no care taken anywhere to improve young men in their own language, that they may thoroughly understand and be masters of it."[54]

The philosopher ridicules the attitude of the school teacher who regards attention to the quality of his pupils' English quite beneath "the dignity of one bred up among Greek and Latin," no matter how little he has of them himself—for whom English is the language of the illiterate vulgar.

But if he condemns as wasteful of time and energy the making of Latin themes, declamations, and orations, Locke is still more impatient, if that be possible, with the practice of making Latin verse. He lends but little encouragement to versification of any kind, but he believes that if anyone desire his son to study poetry, it would be far better for him to read the excellent Greek and Roman poets instead of attempting "bad verse of his own, in a language that is not his own." "And," he adds, "he whose design it is to excel in English poetry, would not, I guess, think the way to it were to make his first essays in Latin verses."[55]

Though more than seventeen sections of his *Thoughts,* including some of the longest in the book, are either wholly or partially devoted to the Latin language, and that chiefly to adverse criticism of the current method of dealing with the subject, Locke is not by any means

[54]Sec. 189.
[55]Sec. 174.

opposed to the proper study of the classical languages or to any foreign language, living or dead. "The more he (the young man) knows the better."[56] But he wants the emphasis in language work placed upon the student's mother tongue. Withal, Locke's whole scheme breathes the spirit of realism and nowhere do we find an excessive tendency towards a linguistic education, that would cultivate many tongues with scarce thoughts enough for one.

Logic is another subject, as taught in his time, which meets with Locke's disapproval. Not, however, the science itself, but the stilted formalism with which it was hedged and because he could not assent to the aim and method of the disputations connected with the teaching of it in the schools. "Right reason," he says, "is founded on something else than predicaments and predicables, and does not consist in taking in mode and figure itself."[57] Again, "if the use and end of right reasoning, be to have right notions and a right judgment of things, to distinguish betwixt truth and falsehood, right and wrong, and to act accordingly; be sure not to let your son be bred up in the art and formality of disputing, either practicing it himself, or admiring it in others; unless instead of an able man, you desire to have him an insignificant wrangler, opiniator in discourse, and priding himself in contradicting others; or,which is worse, questioning everything, and thinking there is no such thing as truth to be sought, but only victory, in disputing."[58] Vives expressed the same thought, in 1519, when he attacked the method of disputation in his day. "The depraved desire of honor or money penetrated the minds of disputants, and just as in a prize fight, victory alone, not the elucidation of truth, became the aim."[59]

Locke's criticism of the prevailing educational meth-

[56]Sec. 189.
[57]Sec. 188.
[58]Sec. 189.
[59]Cf. Watson, Vives: On Education, Cambridge 1913, p. lviii.

ods was not purely negative and destructive, not even largely so, but mainly constructive. He offers something definite to replace what he rejects as unsuited to the times or to the nature of the child. His is not an inflexible program of study to which every student must conform regardless of his native talent or future calling in life. He recognizes that "each man's mind has some peculiarity, as well as his face, that distinguishes him from all others; and there are possibly scarce two children who can be conducted by exactly the same method."[60] He cautions the tutor to remember that his business is not so much to teach a young gentleman all that is knowable, as to raise in him a love and esteem of knowledge, and to put him in the right way of knowing and improving himself, "when he has a mind to."[61]

Locke's criterion of fitness and suitability of any curriculum is, "that which is useful or necessary to a gentleman;" non-essentials should be allowed to pass, especially where there is no talent for the subject in question."[62] Unfortunately, the term "useful," without its objective correlate, is too indefinite to be a satisfactory test. We would like to ask not only "useful" for whom, but "useful" for what? The philosopher does not mark out any specific line of activity for which he intends to fit his "young gentleman," and though he says explicitly, "a gentleman's more serious employment I look on to be study," he by no means wished to encourage a life of idle speculation, in which thought falls short of finding its complete expression in action. In section 187, he refers to a gentleman's duty and concern "diligently to apply himself to that wherein he may be serviceable to his country."

When we examine the whole range of subjects whose worth and method are discussed, we arrive at the con-

[60] Quick's Edition of *Thoughts*, Sec. 217.
[61] Sec. 195.
[62] Sec. 161.

clusion that *ethics, history,* "the *general part of civil law," English Law, Latin,* and a good *command of English,* together with what is implied in these or required as a preparation, constitute in Locke's estimation the most desirable course for his pupil. To this we may add, as electives, the first six books of Euclid, accounting, shorthand, natural philosophy, astronomy, French, Greek, dancing, drawing, music, and manual training.

He calls history "the great mistress of prudence and civil knowledge," and regards it "to be the proper study of a gentleman, or man of business in the world."[63] With it he links geography and chronology, "which rank the actions of mankind into their proper places of time and country, and, without which, history would be only a jumble of matters of facts," but ill retained and very little useful. The "general part of civil law and history are studies which a gentleman should not barely touch at, but constantly dwell upon, and never have done with. A virtuous and well-balanced young man, that is well-versed in the general part of civil law (which concerns not the chicane of private cases, but the affairs and intercourse of civilized nations in general, grounded upon principles of reason) understands Latin well, and can write a good hand, one may turn loose into the world with great assurance that he will find employment and esteem everywhere."[64] English law in particular, he considers necessary for a gentleman, "whose business is to seek *the true measures of right and wrong.*"[65]

If he made such a strong plea in behalf of a practical course in English, it was because of the woeful neglect into which the subject had fallen and the unnatural

[63]Sec. 182.

[64]Sec. 186.

[65]Here we have the utterance of a principle or norm of right and wrong that has since infected the whole domain of British economic life as well as her national and international policy.

methods pursued in the little that was taught. "There can scarce be a greater defect in a gentleman," he says, "than not to express himself well, either in writing or speaking. But yet, I think, I may ask my reader, whether he doth not know a great many, who live upon their estates, and as, with the name, should have the qualities of gentlemen, who cannot as much as tell you a story as they should, much less speak clearly and persuasively in any business? This I think not be so much their fault, as the fault of their education. . . . They have been taught rhetoric, but yet never taught how to express themselves handsomely with their tongues or pens in the language they are always to use; as if the names of the figures that embellished the discourse of those who understood the art of speaking, were the very art and skill of speaking well."[66] "If any one among us," he adds, "have a facility or purity more than ordinary in his mother tongue, it is owing to chance, or his genius, or anything rather than his education or any care of his teacher."[67] The history of English literature is replete with illustrations to confirm Locke's contention.

While Locke insists in making the curriculum more rational and real, he is equally urgent in his advocacy of more natural and efficient methods of instruction. He lays it down as a principle that, "children should not have anything like work, or serious, laid on them."[68] The utter lack of interest in books and learning evinced by the majority of men all the rest of their lives is attributed by Locke to the injury done to their minds and bodies, by "being tied down to their books in an age at enmity with all such restraint." . . . " 'Tis like a surfeit," he says, "that leaves an aversion behind not to be removed."[69] Again he says, "none of the things they

[66] Sec. 189.
[67] Sec. 189.
[68] Sec. 149.
[69] Sec. 149.

are to learn, should be made a burden to them, or imposed on them as a task. Whatever is so proposed, presently, becomes irksome; the mind takes an aversion to it, though before it were a thing of delight or indifferency.'"[70] "To things we would have them learn, the great and only discouragement I can observe, is, that they are called to it, 'tis made their business, they are teazed and chid about it, and do it with trembling and apprehension; or, when they come willingly to it, are kept too long at it, till they are quite tired: All which intrenches too much on that natural freedom they extremely affect.'"[71] Above all, children should never learn to associate the idea of pain and punishment with the thought of books and study.

On the contrary, the things to which we would draw children, "should be ordered so, that they insinuate themselves into them as the privilege of an age or condition above theirs; then ambition, and the desire still to get forward and higher and higher, and to be like those above them, will set them to work, and make them go on with vigour and pleasure; pleasure in what they have begun by their own desires, in which the enjoyment of their dearly beloved freedom will be no small encouragement to them. To all which, if there be added the satisfaction of credit and reputation, I am apt to think there will need no other spur to excite their application and assiduity, as much as is necessary. I confess, there needs patience and skill, gentleness and attention, and a prudent conduct to attain this at first. But why have you a tutor, if there needed no pains?"[72]

"I have always had a fancy that *learning* might be made a play, and recreation to the children; and that they might be brought to desire to be taught, if it were

[70] Sec. 73.
[71] Sec. 76.
[72] Sec. 76.

proposed to them as a thing of honor, credit, delight, and recreation, or as a reward for doing something else; and if they were never chid or corrected for the neglect of it."[73] As confirming this contention, he cites the example of the Portuguese, who have roused such "emulation among their children, to learn to read and to write, that they cannot keep them from it." He goes even further when he says, that children "should seldom be put about doing even those things you have got an inclination in them to, but when they have a mind and disposition to it."[74] It only wearies them to no purpose. "Change of temper should be carefully observed in them, and the favorable seasons of aptitude and inclination be heedfully laid hold on; and if they are not often enough forward of themselves, a good disposition should be talked into them, before they be set upon anything. This I think no hard matter for a discreet tutor to do, who has studied his pupil's temper, and will be at a little pains to fill his head with suitable ideas, such as may make him in love with the present business. By this means a great deal of time and tiring would be saved: For a child will learn three times as much when he is in tune, as he will with double the time and pains when he goes awkwardly, or is dragged unwillingly to it. If this were minded as it should, children might be permitted to weary themselves with play, and yet have time enough to learn what is suited to the capacity of each age. But no such thing is considered in the ordinary way of education, nor can it well be. That rough discipline of the rod is built upon other principles, has no attraction in it, regards not what humor children are in, nor looks after favorable seasons of inclination. And, indeed, it would be ridiculous, when compulsion and blows have raised an aversion in the child to his task,

[73]Sec. 146.
[74]Sec. 74.

to expect he should freely of his own accord leave his play, and with pleasure court occasions of learning, whereas, were matters ordered right, learning anything they should be taught, might be made as much a recreation to their play, as their play is to their learning. The pains are equal on both sides. Nor is it that which troubles them; for they love to be busy, and the change and variety is that which naturally delights them. The only odds is, in that which they call play they act at liberty, and employ their pains (whereof you may observe them never sparing) freely; but what they are to learn is forced upon them, they are called, compelled, and driven to it. Get them but to ask their tutor to teach them, as they do often their play-fellows instead of calling upon them to learn, and they being satisfied that they act freely in this as they do in other things, they will go with as much pleasure in it and it will not differ from their other sports and play. By these ways, carefully pursued, a child may be brought to desire to be taught anything you have a mind he should learn."[75]

Locke foresees that this method will not work with all; that there are, in fact, children in whom these "seasons of aptitudes and inclination" occur so rarely or at such irregular intervals, that waiting upon them would result in a complete neglect of their improvement and tend to cultivate and confirm habits of idleness and sloth. Here our philosopher is confronted with a most ordinary difficulty and he solves it in the most ordinary fashion—he forgets his fundamental principle. He tells us to give these children at such times, "when they are by laziness unbent, or by avocation bent another way," a lesson in self-mastery by "endeavoring to make them buckle to the thing proposed."[76] In section 87, he teaches us in plain words how to succeed in this attempt:

[75]Sec. 74.
[76]Sec. 74.

"And if they (milder methods) will not prevail with him to use his endeavors, and do what is in his power to do, we make no excuses for the obstinate. Blows are the proper remedies for those. . . . He that wilfully neglects his book, and stubbornly refuses anything he can do, required of him by his father, expressing himself in a positive serious command, should not be corrected with two or three lashes, etc."

Nevertheless, Locke rightly distinguishes between punishment thus administered and the brutal habit of "setting children a task, and whipping them without any more ado if it be not done, and done to our fancy."[77]

Following out his plan of making study play and sport, Locke proposes to commence the teaching of reading to a child as soon as he can talk. He suggests to paste the letters of the alphabet upon the faces of a twenty-four sided polyhedron. This he would have others play with, throwing for an *A* or *B*, etc., in the way men throw dice for a seven or eleven, and he would not have the child understand that it is anything but a play for older persons, in order thus to tempt him to it indirectly. To keep in the child's mind the idea of play, permitted only at times, the toy should be placed out of his reach when playtime is over. Begin with two or three letters and add others, few at a time, until all the letters are known. Then by substituting syllables for letters and still adhering to the idea and mode of play, the child may learn to read, without knowing how he did so.

When far enough advanced by such methods, place in his hands some entertaining book, like Aesop's *Fables*, preferably an illustrated edition, so that the knowledge of visible objects may enter into the mind through the proper sense. Awaken and intensify his interest in his newly acquired art by talking to him about the stories

[77]Sec. 78.

he has read and hearing him reciting them. Later on stories from the Bible, in a form suitable to the child's capacity, will make interesting as well as instructive reading. As soon as he can read you may teach him penmanship by the tracing method. By the time the child can speak English, he may be taught foreign languages, French first and later on Latin; both by the conversational method, exclusively. The grammar of any language should not be considered till the pupil can speak it. Where the tutor is not sufficiently familiar with the Latin to use the colloquial method, let him read an interlinear with his pupil. When a moderate knowledge of Latin has been acquired in this way, the pupil may be advanced to the reading of some easy text, such as Justin or Eutropius, making free use of the English translation if he please. There can be no objection to this, he argues, because "Languages are only to be learned by rote," so that at the thought of the things we would speak of, the tongue falls into the proper expression without the intermediary of grammatical rules. The grammar of a language is not necessary except as a preparation for rhetoric in the case of one who desires to make a critical study of that language. For a reading knowledge of the tongue, grammar may very well be dispensed with."[78]

Locke gives proof of his realistic tendency when he says that, "the learning of Latin being nothing but the learning of words," we should "join as much real knowledge with it" as possible. He suggests to connect with it the study of minerals, plants, animals, and especially geography, astonomy, and anatomy.

He insists that the study of English be made practical by frequent theme writing, preceded by oral composition and extemporaneous speaking upon subjects with which the pupil is familiar. The rules for practice should be few and the models for imitation the very best.

[78]Vide Sec. 169.

Locke considers arithmetic "the easiest, and consequently the first sort of abstract reasoning, which the mind commonly bears or accustoms itself to . . . a man cannot have too much of it, nor too perfectly."[79]

Summary

Locke's educational endeavors were directed in the first place in favor of more realism and less formalism in the curriculum.

With him, thought had greater value than its expression and held precedence in every educational process. Consistent with this principle he advocated greater emphasis on the content subjects and the things that will be useful to the pupil in after life. A practical course in English is to take the precedence over the pursuit of any foreign language, living or dead.

But the matter and the method of an educational program must be adapted not only to the actual conditions of life, but to the needs and aptitudes of the individual student as well.

The shortest and the easiest road to knowledge is the best. The direct way to knowledge is the shortest. "Draw from the springhead, and take not things at second hand."[80]

The way is made easy: directly by separating every educational act into its simplest elements possible,[81] and then proceeding gently and insensibly one step at a time, so as to avoid all confusion; indirectly by the element of interest which heightens mental power. Study can be made as interesting as play. "The pains are equal on both sides."[82] The essential idea of play as applied to study is that of voluntary activity in which the element of variety serves to make one occupation a rest and

[79]Sec. 180.
[80]Sec. 195.
[81]Sec. 160.
[82]Sec. 74.

recreation to another. It is the teacher's business to stimulate direct as well as indirect interest in his subject, and to attune the student's mind to the work in hand. For this purpose "he should make the child comprehend, as much as may be, the usefulness of what he teaches him, and let him see, by what he has learnt, that he can do something which he could not do before; something, which gives him some power and real advantage above others who are ignorant of it."[83]

The kindly personality of the educator often exercises as powerful an influence toward eliciting effort as does the intrinsic interest of the subject. But it is not enough for the educator to be methodical himself, he should likewise instruct his pupils in the proper methods of study so as to smoothen the way, should they at any time desire to pursue further on the way to learning.

Lastly, the educator must ever bear in mind that his business is not so much to impart to his pupil all that is knowable, as "to raise in him a love and esteem of knowledge; and put him in the right way of knowing and improving himself, when he has a mind to it."[84]

[83] Sec. 167.
[84] Sec. 195.

CHAPTER II

Classification of Locke

Reasons for classifying him

(1) Among the Humanists in Education;
(2) Among the Realists;
(3) Among the Sense-Realists;
(4) Among the Naturalists;
(5) Among the Disciplinarians.

Secondary education in Europe, since the Renaissance, has successively passed through three phases, namely, *humanism, realism,* and *naturalism.* Humanism is based chiefly upon the study of languages, and especially of Latin and Greek. Realism, as its name implies, depends more upon the study of things than of words, the education of the mind through the eye and the hand. It is particularly concerned with those things which bear a direct influence upon life as well as its varied activities. In naturalism we seek to build up the whole nature of man, *i. e.,* to educate, first his body, then his character, and, lastly, his mind.

The various theories of education which have taken a practical form during the last three centuries, may be ranged under one or other of these three heads. Modern education, as we know it, is an unconscious, but not the less a real compromise with and composite of all three ends.

We may sum up the varied activities of the Renaissance in the three general tendencies, representing three great interests almost unknown during the Middle Ages: (1) the real life of the past; (2) the subjective world of emotions springing from the joy of life, from the appreciation of the beautiful; (3) that of physical nature.

1

Among the Humanists

A knowledge of the classical literature had been aglow through the untiring efforts of the monks and others. Monasteries, cathedrals and castles were thoroughly searched in the quest after the manuscripts of Latin and Greek writers. The manuscripts that were found, were multiplied, and the greatest care was taken to secure the correct form of every passage. The devotees of the new movement were called *humanists,* and the training embodying the classics has since been termed "humanistic education."

"In the Renaissance, the revival of the pagan classics gave a new impetus to education and modified the current curriculum in many respects. The movement for popular education grew steadily and the school was granted a large freedom, for the Church not only supplied schools of her own in connection with her parishes, her cathedrals, and her monasteries, but she encouraged free schools, whether supported by guilds, by the towns, or by private enterprise. Nor was education confined to the upper classes.

"The interests of both the Church and State were promoted by the schools whose aim was to develop Christian virtues no less than to impart skill in the arts, and knowledge of literature, theology, philosophy, and the sciences."[85]

The ideal of humanistic education in the narrower sense was the study of words. This conception of education possessed two disadvantages: (1) that words were taught instead of things; (2) that language was taught not as a living organic whole, fitted and complete for the service of life, but as a collection of dried specimens,

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[85]Shields, op. cit., pp. 336, 337.

tabulated and arranged by the ingenuity of grammarians.

Although Locke deprecates strongly the time spent in studying Latin, he, nevertheless, advocates it and insists upon the correct method of teaching it, saying it is fitting for a gentleman to have a knowledge of it.[86] In this he agrees with Montaigne and Rabelais, who both deem Latin essential to a gentleman. In the method of learning Latin, Locke follows what Montaigne tells us of his own childhood. We do not begin with grammar. If possible, a tutor is to be found who speaks good Latin,[87] and is never to allow his pupil to speak or read anything else. This would be the true and genuine way. If a man cannot be had who speaks good Latin, then we are to adopt the plan of having literal translations, printed word for word, and line for line.[88]

Laurie affirms that in respect of intellectual as well as moral aims, Locke, properly interpreted, is more of a Humanist than a Realist—an unimaginative Humanist —but yet a Humanist, though not, of course, in the narrow classical sense. "I claim," says he, "Locke as essentially a Humanist, who had gone astray on the subject of language and discipline in his *Thoughts*, while he corrected himself in his *Conduct of the Understanding*. Locke's supreme defect, which subtracts from his Humanistic claims, was his inability to see the educative effect of literature as such, and his entire ignorance of the relation of the aesthetic emotions to the moral and religious education of youth. Notwithstanding his debt to Rabelais, and still more to Montaigne, his educational conceptions are in the truest sense his own."[89]

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[86]Cf. Sec. 163
[87]Cf. Sec. 167.
[88]Cf. Secs. 167, 168.
[89]Educational Opinion from the Renaissance, p. 233.

2

Among the Realists

Monroe[90] tells us that the term *Realism* is applied to that type of education in which natural phenomena and social institutions rather than languages and literature are made the chief subjects of study. We may consider realism as a reaction from humanism. Graves[91] says that, even before objects were regarded as the true realities, there seems to have been an effort among some later humanists to seek for the "real things" in the ideas that were represented by the written words. McCormick[92] affirms that with the study of words and of literary forms, had come a neglect of the ideas, and of the practical values in the subjects pursued. He also claims the first phase of realism offered a check to the extreme movement by recalling the real purpose of the study of the classics, by keeping in view the practical ends of training, and substituting the study of ideas, training in judgment and power for literary or philological skill. Hence, these realists retained the humanities as the content of instruction and are known as the *Humanistic Realists*. The second phase of realism begins with Bacon, and undertakes to find in nature and natural phenomena the content to be studied and investigated, things, in the objective order, then, come before words; the processes of nature are observed for their lessons in teaching; and sense perception made a fundamental means to learning. The exponents of this phase are the *Sense-Realists*.

Erasmus, in his *System of Studies*,[93] describes the position of the humanistic realist, as follows: "Knowledge seems to be of two kinds, that of things and that

[90]Brief Course in the History of Education, p. 215.
[91]Student's History of Education, p. 152.
[92]History of Education, p. 251.
[93]De Ratione Studii, Paris, 1511.

of words. That of words comes first, and that of things is the more important."

Rabelais (1483-1553) is representative of this type of education. His importance comes, not from any immediate and concrete influence on schools, but from the influence his ideas exerted upon Montaigne, Locke, and Rousseau.

The pedagogy of Rabelais is the first appearance of what may be called *realism* in instruction, in distinction from the scholastic formalism. In place of the old linguistic and formal literary education, he advocated one including social, moral, and physical elements. Like Locke, he had studied medicine and practiced with success.

The educational ideas of Rabelais are to be found in his *Gargantua* and *Pantagruel*. Locke, like Rabelais, insists on having a sensible tutor. Like Rabelais, Locke lays great stress upon physical training. The chief points upon which Rabelais insists are the following: (1) Teaching through the senses; (2) Independence of thought; (3) Training for practical life; (4) Equal development of mind and body; (5) Gentle treatment, and improved methods. Punishment is foreign to Rabelais.

But Montaigne appears to have been the model which Locke more closely followed. With Montaigne, education was not to develop mind and body separately, as with Locke, but together, the whole man.

"The sum total of the views of education, whether of purpose, content, or method, Montaigne expresses in words from Cicero: 'The best of all arts—that of living well—they followed in their lives rather than in their learning.' "[94]

Locke, like Montaigne, believed that education should be practical and aim to prepare man for social living. Hence, he insisted that the child be taught branches use-

[94]Monroe, Brief Course in History of Education, p. 226.

ful to him in his career in life. Even play should tend to develop a strong man that he might attain distinction in the world, for without robust health he would be practically useless to himself and society. He maintained that the only way to know the realities of life was by actual intercourse with men in society. Modern foreign languages, to enable him to travel and secure a wide experience, should be emphasized instead of the ancient languages; social subjects, like history and politics, to develop a sounder judgment, rather than grammar and rhetoric.

He gives this rule "that children may be taught anything that falls under their senses, especially their sight."[95]

3

Among the Sense-Realists

We have thus far traced the conception from humanism to realism and have noted their essential phases. But with conditions changing in the political world, like changes were occurring in the social world, and hence newer methods were needed to satisfy these environments. The fundamental idea that knowledge came primarily through the senses, brought with it a wonderful change in educational matters. Education was to be founded on training in sense perceptions rather than on pure memory activities, and was to be directed toward a different kind of subject matter. It was the beginning of the scientific movement.

As Monroe rightly observes, for the first time, we find formulated a general theory of education based upon rational rather than upon empirical grounds. The new discoveries and the new inventions influenced the sense-realists. They were imbued with an interest in and a

[95] *Thoughts*, Sec. 181.

respect for the phenomena of nature as a source of knowledge and truth, and held that education itself was a natural rather than an artificial process. This belief gave rise to two tendencies observable in the work of all representatives of this group. The first was that toward the formulation of rudimentary science or philosophy of education, based upon scientific investigation or speculation rather than upon pure empiricism. The second was a tendency to replace the exclusive literary and linguistic material of the school curriculum with material chosen from the natural sciences and from contemporary life. The first tendency constituted the earliest attempt to formulate an educational psychology. While several of these men insisted upon the study of the child, and the adaptation of the educational processes to the child, their thought, in respect to these educational principles, was controlled rather by their theory of knowledge, and, as with Bacon, by their investigation into the manner in which knowledge was admitted by mankind as a whole. They possessed little, if any, knowledge of the development and activities of the child's mind. They held, however, that the child should acquire the idea rather than the form, and should understand the object before the word, or the word through the object.[96]

Among the representative sense-realists, we may mention Peter Ramus, Ludovico Vives, Mulcaster, Hoole, Hartlib, Petty, Bacon, Comenius.

Locke has been classed with the sense-realists, because of his leaning somewhat toward the sense-realism of Comenius. Like Montaigne, Locke holds that book education and intellectual training are of less importance than the development of character and polish.

Again, we find that there are also elements throughout the *Thoughts* and to some extent in the *Conduct of the*

[96]Cf. Monroe, op. cit., p. 227.

Understanding, where Locke seems to have been affected by the concrete material and interesting methods of Comenius, as clearly as he was elsewhere by the earlier realism of Montaigne. Even in the subjects he recommends for the education of a gentleman, where he was especially following Montaigne, Locke makes a selection, utilitarian in nature and wide in range, that reminds one of the encyclopedic advice of Bacon, Ratich, and Comenius. He also resembles the sense-realists in desiring to begin with vernacular studies, which with him are reading, writing, drawing, and possibly shorthand. Locke is most thoroughly a sense-realist in his theory of knowledge and the pedagogical recommendations that grow out of it. He holds that impressions are made through the senses by observation, and are only combined afterwards by reflection.

4

Among the Naturalists

Natural education means giving the natural instincts, impulses, and feelings of the child unrestricted opportunity of expression. Hence, it is a negative education, in which development results from experience, not from positive instruction. Intellectually, it means relying upon the natural curiosity of the child; morally, upon natural punishments.

Locke's medical studies well qualified him to write on the physical well-being of the child, and led him to make physical education of primary importance. He also, like Rousseau, emphasized the natural curiosity of the child in his intellectual development and believed in the theory of natural consequences in discipline.

"The little, or almost insensible, impressions on our tender infancies, have very important and lasting consequences."[97]

In section 66, speaking of "the child's natural genius

[97] Sec. 1.

and constitution," Locke approaches the truth which is much dwelt on by later writers on education, that education gives nothing, but only exercises and trains inborn capacities. He observes that "those who are about children should well study their natures and aptitudes," but this is mainly with the view of ascertaining individual peculiarities. With him it is not a general law, but merely yielding to special weaknesses "in many cases," and "all that we can do or should aim at is to make the best of what nature has given." Here he is immeasurably behind Rousseau who demands that the science of education should be based on the study of the nature of children.

In respect to "strait" clothes, he counsels to "let nature have scope to fashion the body as she thinks best. She works of herself a great deal better and exacter than we can direct her."[98]

"It is safer," he says, "to leave them wholly to nature, than to put them into the hands of one forward to tamper, or that thinks that children are to be cured, in ordinary distempers, by anything but diet, or by a method very little distant from it: it seeming suitable both to my reason and experience, that the tender constitutions of children should have as little done to them as is possible, and as the absolute necessity of the case requires."[99]

As a naturalist, Locke is associated with Montaigne on the one hand, and Rousseau on the other.

Rousseau, like Locke, places physical education first. Hence, all the physical wants of the child should be first, because they are natural, and one should allow no restraint of physical freedom by unnatural compulsion. However, we should be very careful to make a distinction between natural and imaginary wants; thus, crying may

[98]Sec. 11.
[99]Sec. 29.

have its foundation in bad temper rather than in any real war. No heed is to be paid thereto, lest it will become a habit.[100]

Quick informs us that "we have now reached the climax (or shall we say the *nadir*) in negation. Rousseau has given the *coup de grace* to the ideal of the Renascence. Comenius was the first to take a comprehensive view of the educator's task and to connect it with man's nature and destiny; but he would not get clear from an overestimate of the importance of knowledge. According to his ideal, men should know all things; so in practice he thought too much of imparting knowledge. Then came Locke and treated the imparting of knowledge as of trifling importance when compared with the formation of character; but he, too, in practice hardly went so far as this principle might have led him. He was under the influence of social distinctions, and could not help thinking of what it was necessary for a gentleman to know. So that Rousseau was the very first to shake himself entirely free from the notion which the Renascence had handed down that man was mainly a *learning* animal. Rousseau has the courage to deny this in the most emphatic manner possible, and to say: 'For the first twelve years the educator must teach the child nothing.' "[101]

We cannot refrain from giving Monroe's ideas of the child as the positive factor in education. "To John Locke," he says, "belongs the honor of writing the first book on education that deals primarily with the child; but to Rousseau belongs the honor of deriving his educational theories from the nature of the child. It may be admitted that Rousseau had little actual knowledge of child life and child nature, and that his sympathy for children was pure sentimentalism, which was never converted into actual practice. It is true, nevertheless, that

[100]Cf. *Thoughts*, Secs. 111, 112, 113, 114.
[101]Educational Reformers, p. 245.

here for the first time education finds its purpose, its process, and its means wholly within the child life and the child experience. An appropriate development of childhood is the purpose of each particular stage of education; the child's nature and the child's growth are to determine the process; the child's experience is to furnish the means. All the pregnant reforms of Pestalozzi, of Herbart, of Froebel, and of the multitude of other reformers of lesser influence, thus find their origin in the teaching of Rousseau. In a similar way sympathy with childhood is emphasized as the qualification of all educational work. Made theory by Rousseau, made practice by Pestalozzi. Sympathy with the child, intellectually, morally, personally, has come to be recognized as an essential in the educative process."[102]

5

Among the Disciplinarians

The essence of the disciplinary conception is this: The process of learning rather than the thing learned is the important and determining thing in education.

Our idea of the disciplinary conception of education is excellently given by Monroe, and hence we hope to be pardoned for this lengthy citation. "The disciplinary conception takes a great variety of forms. But substantially they unite on the one point, namely, that a particular activity or experience, especially of an intellectual character, if well selected, produces a power or ability out of all proportion to the expenditure of energy therein. Such a power when developed will be serviceable in most dissimilar experiences and activities, will be available in every situation, and will be applicable to the solution of problems presented by any subject. More especially the theory asserted that one or two subjects,

[102] Op. cit., p. 294.

thoroughly taught and mastered, were of much greater educational value than a variety of subjects demanding the same amount of time and energy. The disciplinarian believed that those subjects which, through the generality of principles, such as mathematics and logic, or through the formal nature of their content and arrangement, such as the classical languages, furnished a formal training for the various 'faculties' of the mind, were of supreme importance educationally. This value belonged to such subjects irrespective of their relation to life or of their final mastery or use by the pupil. It was further implied, so far as the period of complete dominance of this theory was concerned, that these subjects were peculiarly adapted to the development of the memory and the reason, and that these 'powers of the mind' were preeminently the ones demanded for success in any walk of life.'"[103]

The social changes that were effected during the sixteenth and seventeenth centuries were the cause of destroying what was practical in the learning of the narrow humanistic education. Nevertheless, the religious, psychological, and professional views entertained by its advocates united in demanding the perpetuation of these educational processes. This resulted in the formulation of the disciplinary conception of education.

However, we are not so much concerned with this disciplinary conception of education in its earlier form or in its present status, but rather in its historical formulation in so far as it concerns Locke.

Locke has been classed as a disciplinarian by Monroe, on the basis that he held fundamentally to the doctrine that development comes only through the formation of habit through discipline, and that he applied this doctrine in the mental, moral, and physical phases of life. In this sense Locke was undoubtedly a disciplinarian.

[103] Op. cit., p. 255.

The most recent classification, which emphasizes rather the *Conduct of the Understanding,* is to place him with those who hold to the disciplinary conception of education, though no one who so classified him maintains that he had anything in common with the rigid pedants of his day, who had divorced education from practical life and made it a matter of linguistic drill. They point out that Locke not only made physical education fundamental but that he made it essentially a hardening process, a matter of scanty clothes, hard beds, prescribed diet, open air, and no coddling. They also show that, when treating of moral education, Locke makes character the end of education and states that that end is to be obtained by the formation of good habits through a long discipline of the desires. They admit that in the *Thoughts,* when treating of intellectual education, he devotes himself chiefly to the content of study, where he is in agreement with the realists. But they insist that Locke's true view of intellectual education is to be found in the *Conduct of the Understanding,* where it is shown to consist in the formation of habits of thought through discipline, particularly by the study of mathematics, and where he apparently professes a belief in the transfer of habits and power.

Locke, however, did not hold to this doctrine consistently throughout his writings. In his *Thoughts,* he scarcely intimates it, but the following quotations from his *Conduct of the Understanding* are in harmony with it: "Would you have a man reason well, you must use him to it betimes; exercise his mind in observing the connection of ideas and following them in train. Nothing does this better than mathematics, which therefore should be taught all those who have the time and opportunity, not so much to make them mathematicians as to make them reasonable creatures. . . . Not that I think it necessary that all men should be deep mathematicians, but

that, having got the way of reasoning, which that study necessarily brings the mind to, they might be able to transfer it to other parts of knowledge as they shall have occasion.''[104]

Again, ''the business of education . . . is not, as I think, to make them (the pupils) perfect in any one of the sciences, but to open and dispose of their minds as may best make them capable of any when they shall apply themselves to it. . . . It is therefore to give them this freedom that I think they should be made to look into all sorts of knowledge, and exercise their understandings in so wide a variety and stock of knowledge. But I do not propose it as a variety and freedom of thinking; as an increase of the powers and activity of the mind, not as an enlargement of its possessions.''[105]

Turning now to the *Thoughts,* we find what is called the disciplinary conception of education alluded to in the following passages:

1. ''Learning is the least part of education. Learning must be had, but in the second place, as subservient only to greater qualities. Seek out somebody that may know how discreetly to frame his manners: Place him in hands where you may, as much as possible, secure his innocence, cherish and nurse up the good and gently correct and weed out any bad inclinations, and settle in him good habits. This is the main point, and this being provided for, learning may be had into the bargain, and that, as I think, at a very easy rate, by methods that be thought on.''[106]

2. ''The younger they are, the less, I think, are their unruly and disorderly appetites to be complied with; and the less reason they have of their own, the more are they to be under the absolute power and restraint of those,

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[104]Conduct, pp. 20, 23, Fowler's Ed., Oxford, 1901.
[105]*Ut Supra,* p. 44.
[106]*Thoughts,* Sec. 147.

in whose hands they are . . . the sooner this way is begun with children, the easier it will be for them, and their governors too; and that this ought to be observed as an inviolable maxim, that whatever once is denied them, they are certainly not to obtain by crying or importunity."[107]

3. "I confess, there needs patience and skill, gentleness and attention, and a prudent conduct to attain this at first. But why have you a tutor, if there needed no pains? But when this is once established, all the rest will follow more easily, than in any more severe and imperious discipline."[108]

4. "I think, it may do well to give them something every day (to memorize) to remember; but something still, that is in itself worth remembering, and what you would never have out of mind, whenever you call or they themselves search for it. This will oblige them often to turn their thoughts inwards, than which you cannot wish them a better intellectual habit."[109]

5. "If you have any contest with him, let it be in matters of moment, of truth, of good nature; but lay no task on him about A B C. Use your skill to make his will supple and pliant to reason: teach him to love credit and commendation; to abhor being thought ill or meanly of, especially by you and his mother; and then the rest will come easily."[110]

Locke makes education, as a whole, a process of training or discipline. The primary object of education, according to Locke, is the formation of character. This is clear from what he says about

(a) Physical education: This aims at "strength of body."

(b) Moral education: This aims at the foundation of

[107]Sec. 39.
[108]Sec. 76.
[109]Sec. 176.
[110]Sec. 155.

virtue, the power of self-restraint, self-denial, the endurance of hardships, the formation of good habits.

(c) Intellectual education: This aims not so much at imparting knowledge as at strengthening and developing the intellect, at imparting "intellectual force."

"One might rightly conclude," says Laurie, "that Locke had never fairly faced the question of the *discipline* of the intelligence as opposed to mere instruction, were it not for the *Conduct of the Understanding,* the last of his writings. "In this book," he adds, "the training and discipline of the intelligence is the theme, and while treating of this, many sound rules of general method are given and vividly illustrated. 'This essay,' as Hallam truly says, is a 'treatise on the moral discipline of the intellect.' "[111]

Again, he says, "In the *Conduct of the Understanding,* however, we find the necessary supplement to the *Thoughts* on this point as on others, for it is in fact a treatise on mental discipline; and it is to this valuable essay that we must go, if we wish to know what Locke's idea was of the proper aim of education as regards the intellect."[112]

Summary

The avowed purpose of Locke's educational reform was the achievement of more realism in place of the intense formalism of his day. The idea, the thought, was the important thing rather than the word, the expression. Whatever is useful for the purposes of life is to be preferred. According to Locke's theory, all knowledge comes through the senses; "there, if we would take the true way, our knowledge should begin." But Locke is a sense-realist only in his philosophical speculations, his methods of teaching call for books not for objects: he strives to communicate ideas through words rather than

[111] Op. cit., p. 222.
[112] Id., p. 225.

through direct sense-percepts. His own literary and linguistic education exercised a practical influence upon his educational theories in spite of his speculative realism. As physician, Locke thinks of the health of the body first, not however to practice his art, but to persuade his readers to give nature free scope to fashion the body. Nature, too, may be depended upon to stimulate sufficient inquiry after knowledge of the Creator, but virtue must be ingrained by stern practice of self-denial and obedience to the dictates of reason.

Hence, in his theories of physical and religious training, Locke was a naturalist chiefly, if not pure and simple; in his conception of mental training, he was a rationalistic disciplinarian; in his treatment of the mind, he was a sense-realist, speculatively; in practice, his realism was humanistic, and tinged with rationalistic ideas.

CHAPTER III

LOCKE'S THEORY OF PHYSICAL EDUCATION IN THE LIGHT OF OUR PRESENT KNOWLEDGE OF PHYSIOLOGY, HYGIENE, AND PHYSICAL TRAINING

Quick says that some have maintained that the chief merit of the *Thoughts* lay in the prominence given to physical education, which is the first point treated of; indeed, a recent selection of important passages from the great writers on education gives Locke's advice about physical education only.[113] His own sufferings from ill health, no doubt, made him so urgent on this point. He tells us that if in pursuit of knowledge we are negligent of health, we are likely to "rob God of so much service and our neighbors of all that help, which in a state of health, with moderate knowledge, we might have been able to perform. He that sinks his vessel by overloading it, though it be with gold and silver and precious stones, will give his owner but an ill account of his voyage."[114]

"The necessity of health to our business and happiness," says Locke, "and how requisite a strong constitution, able to endure hardships and fatigue, is to one that will make any figure in the world, is too obvious to need any proof."[115]

Then, he says he will treat, not of what a physician ought to do with a sick child, but what parents ought to do without the help of "physik." He gives this one short rule: "That gentlemen should use their children, as the honest farmers and substantial yeomen do theirs. But because the mothers possibly may think this is a little too hard, and the fathers too short, I shall explain myself

[113]Cf. Quick's Edition of *Thoughts Concerning Education*, Cambridge, 1913, Introduction, p. lii.

[114]Of Study, Quick's Edition, Appendix B, p. 196.

[115]Vide, Sec. 3.

more particularly; only laying down this as a general and certain observation for the women to consider, *viz.*, that most children's constitutions are either spoil'd, or at least harm'd, by *cockering* and *tenderness.*"[116]

1

The Hardening Process

For the purpose of rendering the body fit to resist unfavorable physical influences, such, for example, as extremes of heat and cold, Locke advocated the system of "hardening" as against the protective system, *i. e.*, he proposes to inure the body to hardships by prudently exposing the physical man to wet and cold, to hunger and thirst, and to privations of many kinds. All this he prescribes in the hope and belief of thus developing habits, as he calls them, of resistance to untoward influences of environment and climate. "The strength of the body," he says, "lies chiefly in being able to endure hardships,"[117] and "our bodies will endure anything that from the beginning they are accustomed to."[118] To substantiate his claim he cites the custom of the Maltese, "who harden the bodies of their children, and reconcile them to the heat, by making them go stark naked, without shirt, drawers, or anything on their heads from the cradle till they are ten years old," and of the Scythian philosopher, who could "go naked in frost and snow."[119] He advises, therefore, "not to fence too carefully against the cold of this our climate,"[120] that the child "have his shoes so thin, that they might leak and let in water,"[121] that the feet and legs be bathed in cold water every day, *winter* and *summer*, etc.

[116] Sec. 4.
[117] Sec. 33.
[118] Sec. 5.
[119] Ibid.
[120] Sec. 6.
[121] Sec. 7.

Observation of the mode of life among primitive races leads to the conclusion that repeated exposure to hardship develops in the body a tendency and power toward favorable reaction under adverse conditions. Locke defends his advocacy of the "hardening" system on the ground that it prepares the body for encountering emergencies when the ordinary safeguards of health are wanting. One of the grave objections, however, that attaches to the severe practices of this system, is the probability that those who are weak in their early years will either be permanently injured or destroyed altogether, and there is no guarantee that those thus eliminated would have been the least useful members of society.

The protective system, on the other hand, purposes to shield the body from whatever might have a deleterious influence upon its growth and perfect development, and thus render the parts more capable to withstand the attack of disease when it does come. We now know that, though savage tribes show greater immunity from the minor ailments, their power to resist more serious epidemic diseases and untried hardships is much less than that of civilized peoples.

Dr. J. F. Payne, an eminent physician, is of the opinion that it is erroneous to take either principle as an infallible guide, but that it is safer and better to judge of the individual practice of each system on its own merits.

Goldsmith, in his remarks on Locke's "hardening" system, has anticipated the latest decision of science. He observes that "savages and peasants are generally not so long lived as those who lead a more indolent life," and that "the more laborious the life is, the less the population of the country." He sees that "hardening" involves the hardening of many children out of the world. "The number of those who survive those rude trials bears no proportion to those who die in the experiment." He

ridicules Locke's belief in the omnipotence of habit by telling the following story of Peter the Great. Peter thought it would be convenient if his sailors drank sea-water, so he made an edict that the boys training for sea should be allowed to drink sea-water only. The boys died, and the habit was never established.[122]

Herbert Spencer agrees with Goldsmith in his opinion of the "hardening" system. "Among the sensations serving for our guidance," writes Spencer, "are those of heat and cold; and a clothing for children which does not carefully consult these sensations is to be condemned. The common notion about 'hardening' is a grievous delusion. Children are not infrequently 'hardened' out of the world; and those who survive, permanently suffer either in growth or constitution. 'Their delicate appearance furnishes ample indication of the mischief thus produced, and their frequent attacks of illness might prove a warning even to unreflecting parents,' says Dr. Combe. The reasoning on which this hardening theory rests is extremely superficial. Wealthy parents, seeing little peasant boys and girls playing about in the open air only half-clothed, and joining with this fact the general healthiness of laboring people, draw the unwarrantable conclusion that the healthiness is the result of exposure, and resolve to keep their own offspring scantily dressed! It is forgotten that these urchins who gambol upon the village-green are in many respects favorably circumstanced—that their days are spent in almost perpetual play; that they are always breathing fresh air; and that their systems are not disturbed by over-taxed brains. For aught that appears to the contrary, their good health may be maintained, not in consequence of, but in spite of, their deficient clothing. This alternative conclusion we believe to be the true one; and that an

[122]Essay on Education in *The Bee*, November 10, 1759, quoted by Quick, *Thoughts*.

inevitable detriment results from the needless loss of animal heat to which they are subject.''[123]

The science of hygiene hardly received any consideration in Locke's time, whereas today it demands special attention in every sphere of human life and activity. Hence there are wise prescriptions as to the quality and quantity of clothing to be worn in winter and summer. While admitting that excessive clothing is apt to make the body too tender, modern science advocates clothing suitable to the seasons and climate. Some constitutions have the power to resist cold, and hence can dispense with some clothing that others really need for self-protection.

It is a mistake, says Dr. Howard Fox,[124] to try to endure cold weather without wearing sufficiently warm clothing. Whenever a feeling of cold or chilliness is experienced, it is highly proper to put on an extra garment without delay, and it is folly to wait till the body is chilled before taking the trouble to make a change of clothing. The habit of wearing thin clothing all the year round and of going without an overcoat through the winter to display a vigorous constitution is not advisable. It is true that some persons seem to keep well from such a course, and while the heat producing power may be equal to the extra demand, it is at the expense of the nervous energy of the individual. Children and old people, whose power of producing heat is limited, should be proportionately warmly clad, and the practice of dressing children with the legs exposed is as cruel as it is unhygienic.

Locke says ''tis use alone that hardens it (the body), and makes it more able to endure the cold.'' This dictum seems to ignore the fact that a single life is too short a span of time for the undoing of physical traits, that are the result of centuries of civilized life. Rousseau and other writers have fallen into the same error of ignoring

[123]Education, p. 266.
[124]Pyle, Hygiene of the Skin and its Appendages, p. 52 ff.

the slow changes wrought in our physical constitution by the mode of life peculiar to our ancestors for many generations.

Most important are Locke's warnings concerning the "effect of *hard bodice,* and *clothes that pinch.*" "Narrow breasts, short and stinking breath, ill lungs, and crookedness, are the natural and almost constant effects of hard bodice, and clothes that pinch. That way of making slender waists, and fine shapes, serves but the more effectually to spoil them. Nor can there, indeed, but be disproportion in the parts, when the nourishment prepared in the several offices of the body cannot be distributed as nature designs. And therefore what wonder is it, if it being laid where it can, on some part not so braced, it often makes a shoulder or hip higher or bigger than its just proportion."[125] He urges to "let nature have scope to fashion the body as she thinks best. She works of herself a great deal better and exacter than we can direct her."[126] Locke here agrees with modern science and expresses a truth that our specialists of today fully confirm.

Sir James Crichton, a distinguished writer on mental diseases, goes as far as to speculate upon the possibility that "swaddling-bands so applied at birth as to restrain all muscular movements, and kept on during infancy and childhood, would result in idiocy—a speculation to which the wretched muscular development of most idiots and imbeciles, and the fact that their mental training is most successfully begun and carried on through muscular lessons, give some countenance."[127]

2

Diet

Treating of diet for the child, Locke observes that "if I might advise, flesh should be forborne as long as

[125] Sec. 12.
[126] Sec. 11.
[127] Cf. Pyle, op. cit., p. 333.

he is in coats, or at least till he is two or three years old."[128] Expert opinion, on this question, is divided apparently even today. Some maintain that children should not be given fats and oils, while others hold that they are injurious; extremists believe that meat should not be taken at all and attribute many diseases to its use; the majority of physicians declare that fats and oils are necessary for those who live in cold climates, and even for those living in warm climates these substances have always formed an important item in the foods that are selected by choice. There are some children who have a great dislike for fats and oils and whose health may be failing for the want of them. In such cases evident improvement is observed when fats are prescribed by the physician. It cannot be denied that meat is, if not necessary, still a most desirable part of the diet of children, after two years of age, especially in a cold climate, and in a race which has for many generations been accustomed to animal food. Dr. Payne attributes a large part of children's ailments to imperfect nutrition, even when food is taken in abundance. Apart from the special principle contained in meat alone, to which the great chemist Liebig attached so much importance, it should be remembered that the precise kind of nourishment furnished by meat can only be obtained from other food in greater bulk, with more waste, and by throwing more work on the digestive organs. Hence, in the light of modern physiology, Locke's principle cannot be accepted implicitly, though probably there was in the seventeenth century an inordinate consumption of meat among the upper classes, and among all except the poor. The fault, however, is common among the working classes in times of prosperity. And Doctor Stockton states "that the assimilation of fats is a simpler process than that attending the albuminoids, starches, and sugars; and to suppose that

[128]Sec. 13.

fats are unwholesome is an erroneous conclusion, probably based upon the fact that when incorporated with starches and sugar in the form of pastries, etc., they are likely to disturb digestion.''[129]

Spencer also opposes Locke's theory concerning the eating of meat. He says, ''the current opinion is that they (the children) should have but little animal food. Among the less wealthy classes, economy seems to have dictated this opinion—the wish is father to the thought. Parents not affording to buy much meat, and liking meat themselves, answer the petitions of juveniles with—'Meat is not good for little boys and girls;' and this, at first, probably nothing but a convenient excuse, has by repetition grown into an article of faith. While the classes with whom cost is not a consideration, have been swayed partly by the example of the majority, and partly by the influence of nurses drawn from the lower classes, and in some measure by the reaction against past animalism. If, however, we inquire for the basis of this opinion, we find little or none. It is a dogma repeated and received without proof. . . . It may indeed be true that, to the young child's stomach, not yet endowed with much muscular power, meat, which requires considerable trituration before it can be made into chyme is an unfit element. . . . And while the evidence in support of this dogma, partially valid in the case of very young children, is not valid in the case of older children, who are, nevertheless, ordinarily treated in conformity with the dogma, the adverse evidence is abundant and conclusive. The verdict of science is exactly opposite to the popular opinion. We have put the question to two of our leading physicians and to several of the most distinguished physiologists, and they uniformly agree in the conclusion, that children should have a diet not *less* nutritive, but, if anything, *more* nutritive than that of adults.''[130]

[129]Pyle, Personal Hygiene, p. 39.
[130]Op. cit., pp. 249, 250.

Locke advises "two meals a day,"[131] and advocates "no time kept constantly to meals."[132] There has been much discussion about the proper number of daily meals. For the present purpose, observes Dr. Payne, it may be sufficient to point out that children require food much oftener than adults; the consumption, and hence the chemical change of food within their bodies, being more rapid. No object can be served by keeping them long fasting, and there can be little objection to the modern practice of giving children three chief meals in the day, at one only of which is meat necessary, unless in exceptional cases. A piece of bread between meals is often desirable and seldom, if ever, injurious.

Now, as to the irregular hours of meals, it is impossible to approve of Locke's suggestion. Both experience and physiological theory point to the advantages of regularity concerning meals. The waste of the body is constant, and, to a certain extent, independent of exertion. "If this waste," says Dr. Payne, "be not practically made up for by proper nutrition, there is a real danger that the organs, especially in growing children, may be actually damaged by working them when their nutrition is low. It should never be forgotten that fatigue in itself and for itself is bad. This is well known to trainers and teachers of gymnastics, who find by experience, that moderate exercise of the muscles, for instance, in a well-nourished body, favors their growth, but that excessive exercise, or what is the same thing, exercise in a badly nourished body, rather tends to cause wasting. There is also reason to believe that the heart suffers (becoming dilated) if a call is made upon its activity during a prolonged fast."

It may prove interesting in the light of modern science to give the meals prescribed by specialists for

[131] Sec. 14.
[132] Sec. 15.

children until *one and a half years:* (1) Breakfast (6-7 A. M.), (*a*) Stale bread soaked in a glass of milk; (*b*) porridge, cooked for two hours at least, of oatmeal, hominy or wheaten grits, etc.; (*c*) bread, broken into soft boiled or a poached egg, and a glass of milk.

(2) At 10 A. M. a glass of milk.

(3) Dinner (1:30-2:00 P. M.) a glass of milk; also (*a*) soft-boiled egg and thinly buttered stale bread; (*b*) bread or rice or grits, moistened with gravy (no fat), beef-tea, beef-juice; also a little junket or rice-sago or tapioca pudding.

(4) At 5 P. M. a glass of milk, perhaps with bread.

(5) At 9 or 10 P. M. a glass of milk.

At the age of two years the diet is slightly increased.

The baby is allowed boiled rice or mashed baked potatoes, or mutton or chicken broth, or minced white meat of chicken, turkey, fish, or minced rare roast beef, beef-steak, mutton or lamb. After this age there is a further increase by the addition of solid meat food and fresh or stewed fruits in moderate amount.[133]

Locke was also cautious against drinking when hot; "for if he be very hot, he should by no means *drink.* More fevers and surfeits are got by people's drinking when they are hot, than by any one thing I know."[134] Dr. Payne, commenting upon Locke's opinion, says, "there is probably some ground for the very general belief that drinking cold water when hot is injurious; but it is not easy to specify any important diseases, still less fatal ones, which can be clearly traced to this cause. In my own experience, I have never met with an instance of any serious disease thus induced, and very rarely of any even attributed to it. A few cases of trifling affections of the skin have been, with some plausibility, attributed to drinking while hot. . . . It has been said that

[133] Vide Pyle, op. cit., p. 491.
[134] Sec. 17.

death from syncope or collapse may be the result, but this seems to me to require confirmation. The word *fever* was used very loosely in the time of Locke, but it may be taken for granted that nothing which we now call fever could possibly be caused by the practice here apprehended."

Water is necessary to life. Some declare that about eighty ounces of fluid should be taken daily. This includes that which is taken in combination with solid foods. Most people leading sedentary lives take too little water, and also err in taking it for the most part when eating. A certain amount of water always should form a part of every meal, and particularly as it is necessary in those who have very active digestion. But while it is allowable for water to be taken with meals, it again should be repeated that the food should not be washed down. The proper time for taking the bulk of the fluid is between meals, particularly early in the morning and late at night. It is a fact well known to physicians, observes Dr. C. G. Stockton, that women especially drink too little water; the habit probably results from the inconvenience attending the taking of the proper amount. The American habit of drinking ice-water has been much censured. It is unnatural, and in some instances harm may be traced to it. In many, no injurious effect appears to follow its use.

Water in the body, then, is necessary to life itself. But another most important use is to wash out all the waste substances from the different organs and tissues and carry them to the liver, the kidneys, the lungs, and the skin, where they can be burned up and got rid of. We must keep our bodies flushed with water.[135]

Locke's rule, "his drink should be only small beer,"[136] sounds peculiar. But when we study the social history

[135]Cf. Dr. Woods Hutchinson, A Handbook of Health, p. 70.
[136]Sec. 16.

of England, we can readily understand its meaning. Water was not the ordinary drink of children, and in his time it was not taken as the habitual beverage by persons of any age. Even in our day, wine is the ordinary beverage of the French, while beer is the drink of the Germans and Belgians. Indeed, we find that, in the seventeenth and preceding centuries, water was never recommended, but we do find books were written against water-drinking. There was prevalent a widely spread notion that various evils might result from drinking too much, or even any, cold water. This was due to a great extent to tradition as well as prejudice. There is no doubt of the fact that drinking-water in cities during the Middles Ages was frequently polluted, and hence people, especially in times of pestilence, conceived the idea of its unwholesomeness.

The extreme care taken by municipalities to procure good pure water for drinking purposes, was something unknown in Locke's days. Every precaution that prudence suggests, aided by science, to secure pure water is now carefully followed. Sanitary conditions are strictly observed and stringent rules are formulated to safeguard the public. Herein is the superiority of our day signalized over the seventeenth century on this vital question of drinking-water for cities. Indeed, no expense is too great to procure this great blessing for the community.

Small beer was regarded in Locke's time as the drink of temperate people. Dr. Sydenham, a close friend of Locke, recommends gouty persons to drink beer in preference to either wine or water. "It is difficult to treat seriously Locke's suggestion that beer should be brought to a blood heat before it can be drunk safely; for if beer generally is unwholesome, warm beer is certainly more so, and nasty into the bargain. Locke seems to have had unreasonable fear of allowing children to quench their natural thirst."[137]

[137]Dr. Payne's comment.

3. Clothing

Strange, indeed, was Locke's obsession about "shoes so thin, that they might leak and *let in water,* whenever he (the child) comes near it."[138] He was equally insistent on bathing the feet and legs in cold water. In a letter to Molyneux, Locke gives an account of his experiment with Frank Masham: "One thing gives me leave to be importunate with you about; you say your son is not very strong; to make him strong, you must use him hardly, as I have directed; but you must be sure to do it by very insensible degrees, and begin an hardship you would bring him to only in the Spring. This is all the caution needs be used. I have an example of it in the house I live in, where the only son of a very tender mother was almost destroy'd by a too tender keeping. He is now, by a contrary usage, come to bear wind and weather, and wet in his feet; and the cough which threatened him under that warm and cautious management, has left him, is now no longer his parents' constant apprehension as it was."

Whilst Locke held that thin shoes "might leak and let in water,"[139] another great English surgeon, Dr. Abernethy, advised the opposite: "Keep your head cool, and your feet warm." Civilized communities generally reject Locke's proposal as to wearing leaky shoes, as well as going barefoot, the latter on grounds of convenience and cleanliness, and not from the fear of cold.

4. Sleep, Bathing, Etc.

Locke is, however, in accord with modern experience about sleep. He says "of all that looks soft and effeminite, nothing is more to be indulged children, than *sleep.* In this alone they are permitted to have their full satisfaction; nothing contributing more to the growth and

[138] Sec. 7.
[139] Ibid.

health of children, than sleep . . . great care should be taken in waking them, that it be not done hastily, nor with a loud or shrill voice, or any other sudden violent noise. This often affrights children, and does them great harm; and sound sleep thus broke off, with sudden alarms, is apt enough to discompose anyone."[140] There is a natural kindness and sympathy in his attention to details in the matter of waking the child. In this respect, the best nurses and most careful mothers will bear him out.

Montaigne, in one of his *Essays*,[141] describes the characteristic kindness of his father in this matter: "Some being of opinion that it troubles and disturbs the brains of children suddenly to wake them in the morning, and to snatch them violently and overhastily from sleep (wherein they are much more profoundly involved than we), he (my father) caused me to be awakened by the sound of some musical instrument, and was never unprovided of a musician for that purpose."

Concerning beds, Locke says, "let his bed be hard, and rather quilts than feathers. Hard lodging strengthens the parts . . . a tender, weakly constitution, is very much owing to *down-beds*. The great cordial of nature is sleep. He that misses that, will suffer by it . . . He that can sleep soundly, takes the cordial; and it matters not whether it be on a soft bed or the hard boards."[142]

His advice about "costiveness"[143] is excellent, and he tells us that "costiveness too has its ill effects, and is much harder to be dealt with by physik; purging medicines; which seem to give relief, rather increasing them than removing the evil." Locke evinces much common sense in both these instances. In this he agrees with the specialists in hygiene. Indeed, his remarks cannot

[140]Sec. 21.
[141]Hazlitt's Ed., Vol. 1, c. 25, p. 213.
[142]Sec. 22.
[143]Sec. 23.

be too strongly recommended for practice, and parents and teachers should strive to aim at the formation of good habits in such matters in their children and pupils, as the best foundation of sound health in after life.[144]

The practice of cold bathing was introduced into England only at the end of the seventeenth century from Holland and Germany. But the custom was first confined to the use of natural springs or wells of ancient reputation; later on baths in houses were used. In both cases, however, baths such as we now use for the purpose of cleanliness or enjoyment were prescribed as medicinal uses. Hence the therapeutic use of cold water was regarded in the seventeenth century as a return to the practice of the Greek and Roman physicians.

Baths, according to modern hygiene, are often spoken of as local or general, as the ablution is confined to a portion or the whole of the body. Again, they may be classified according to the temperature as follows: hot, over 98 F.; warm, between 90 and 98 F.; tepid, between 80 and 90 F.; cool, between 65 and 80 F.; and cold, below 65 F. These are merely arbitrary, but convenient distinctions.

As to the cold bath, Locke says it does wonders, but he gives no special directions, nor does he tell its effects on the body. In the light of modern discovery we have a better understanding of the beneficial effects of the cold bath and more specific directions as to its use. In the words of a specialist, Dr. Howard Fox, the cold bath is intended to act as a stimulant and give strength, as opposed to the warm bath, which has a soothing action, or, technically speaking, is sedative.

The proper time to take a bath is before breakfast and as soon after rising as convenient. A simple and by no means ineffectual way of taking the morning bath is with the sponge, for the conveniences of a shower

[144]Cf. Pyle, op. cit., p. 51.

bath or tub are not always at hand. Everyone, however, may possess a sponge and a bowl of cold water, and will derive health and enjoyment from their daily use. Considering the fact that cold water baths are so beneficial and pleasant, as those who take them will affirm, it seems strange that, in England, at least, such a small number of persons indulge in them.

The physiologic action of the cold bath is to contract the cutaneous vessels and to drive the blood to the internal organs, causing a pallor to the skin. The respiration is greatly increased in depth, quickened at first and then slowed. The frequency of the pulse is lessened and the temperature somewhat lowered. The nervous system and especially the mental faculties are immediately and very powerfully stimulated. Upon emerging from the bath, if the reaction takes place, the tiny arteries dilate and cause the skin to be flushed, the pulse and respiration soon become normal, and the bather experiences very quickly a sensation of warmth and general well-being. This reaction is the test of prime importance as to whether or not the bath is well borne. After leaving the bath, in order to aid the reaction farther, the bather should rub the body from head to foot with a rough towel till the skin fairly glows, and when entirely dry the clothing may be put on without delay.[145]

When studying Locke's prescriptions about health and the care of the body, we are astonished at the simple remedies he offers. Physiology, in his day, was in its infancy. Hygiene and physical culture were sciences hardly considered and apparently not understood. Hence, it is a matter of surprise that when viewed in the light of our advanced science, Locke should have been so successful, as the treatment of Shaftesbury and his son prove. Today physiology forms a branch of study in all high schools and colleges, and, therefore, the

[145] Cf. Pyle, op. cit., pp. 61, 62.

science is familiar, at least in its elements, to many, as well as the principles and laws of hygiene. Besides, medical science has been completely revolutionized since Locke's time, and the practices in vogue then are now antiquated. Newer and better methods have been introduced, and so many new discoveries have been made in every department of medicine, and there is really no comparison possible between the seventeenth and our century. These sciences possessed then the merest rudiments in contrast with the development of our time. Every department of medicine, of physiology, and of hygiene has its specialists, for it is impossible for any one man to master the whole science. Hence it is that Locke could not possibly have given us the methods and processes that now obtain. There is a marked limitation in his system for the care of the health and body of the child. Today we have the hygiene of infancy which is a distinct branch of the science of medicine. It is most thorough and enters into the minutest details, and withal is perfected more and more every year. Then, too, there is domestic hygiene which is concerned with all those factors in the home life of the individual, which may be concerned in affecting his general health; such as, the ventilation, heating, water-supply, and sewage-disposal of the house; while other factors, such as the nature and quality of the food and methods of preparation, operate more particularly upon individual occupants.

Pyle says truly, "public hygiene may be enforced, but personal and domestic must be taught. No law can compel citizens in times of epidemics of typhoid fever or cholera to boil their drinking-water and cleanse food that is to be eaten without cooking, but persistent warnings from the health authorities, public lectures, and literature from physicians, and newspapers and periodical discussions, will be the greatest service in combating the spread of disease. General sanitary improvement is

dependent upon the intelligence of the community, as well as upon efficient health officials, and one of the important duties of the latter should be to strengthen public confidence and disseminate more widely knowledge concerning public, domestic, and personal hygiene."[146]

We do not find in Locke any inculcation of personal hygienic ideals, which mean so much in our progressive civilization and constitute an important factor for the well-being of individuals. The hygienic habits insisted upon by him, are of a general character and possess no specific qualities, such as are advocated by our educators of today.

"Thus the habits of correct posture, graceful carriage, exercise, cleanliness, moderation, are ultimately hygienic habits, and the ideals through which they are generalized are hygienic ideals—beauty, grace, health, chastity, temperance, love of out-door life. These hygienic habits and ideals might be called the balance wheels of civilization; it is through their operation that man has so far escaped annihilation at the hands of the very agencies that have lifted him up."[147]

5. Play and Exercise

When reading Locke's ideas about "play games," we are impressed with the meagreness of his instructions. We fail to find in them any principles that tend to the making of manly characters. Evidently, the custom that prevailed in his day was to give "play things," childish in their nature and better fitted for girls than boys. He speaks about "tops, gigs, battledores, and the like," and counsels that "all the plays and diversions of children should be directed towards good and useful habits, or else they introduce ill ones. Whatever they do, leaves some impression on that tender age, and from thence re-

[146]Op. cit., Introduction, p. ix.
[147]Bagley, The Educative Process, p. 346.

ceive a tendency to good or evil; and whatever hath such influence, ought not to be neglected.''[148] Nothing specific is said about out-door exercise or play, especially through those out-door games for which nature calls. Our physiologists and educators demand these sports and give reasons therefor.

''For the best results in childhood days, nature calls for play rather than work. The out-door play of children tends to develop the larger and freer bodily movements. It enlarges the lungs; it strengthens the heart; it promotes circulation; it gives grace and suppleness to the figure; it provides varied activities which flow from native well-springs of interest; and it thus lays the foundation for finer adjustments and for a higher development of the whole being; and above all it tends to put the child in a condition to sustain some of the inevitable strains which he will meet in the schoolroom. The work begun in the play of childhood should be completed by the games and athletic sports which find legitimate place in the latter portion of the educative process not only as means of perfecting physical development but as valuable means of forming character and developing necessary social qualities.''[149]

Although Locke was a physician as well as a great sufferer, he nowhere gives any rules concerning the means of securing physical development, nor how to adjust conditions to meet the requirements for the preservation of the health of the child, suitable to the needs of civilized life. It is true that he advocated the ''hardening'' process, but that does not satisfy science. Health is the great question of our day and nothing is left undone to secure it for all. Physicians and educators are working in harmony to obtain it for the children attending school, and devise excellent means and processes to attain that end.

[148]Sec. 130.
[149]Shields, op. cit., p. 188.

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The saying of Montaigne, which is sometimes quoted as a watchword by the advocates of physical culture, that "we have not to train up a soul nor yet a body, but a man, and we cannot divide him," expresses a truth which lies at the basis of rational education. It is, indeed, the strongest plea for systematic training of the body that it help in the harmonious development of the whole man.

Apart from its effect mentally and its value morally, in teaching discipline, obedience, and courage, physical education, according to Georges Demeny, a noted French authority, has three objects: "to confirm health, to give a harmonious development of the body, and to teach how to best utilize the muscular force in the different applications which are demanded in life."[150]

After proving the essential superiority of play to gymnastics, Spencer says: "Granting then, as we do, that formal exercises of the limbs are better than nothing—granting further, that they may be used with advantage as supplementary aids; we yet contend that such formal exercises can never supply the place of the exercises prompted by nature. For girls, as well as for boys, the sportive activities to which the instincts impel, are essential to bodily welfare. Whoever forbids them, forbids the divinely appointed means to physical development."[151]

6. Physical Education of Girls

Although Locke gives no specific instruction for the education of girls, he hints that "the nearer they come to the hardships of their brothers in their education, the greater advantages will they receive from it all the remaining part of their lives."[152] In Locke's time the

[150]Apud. Pyle, op. cit., p. 333.
[151]Op. cit., p. 280.
[152]Sec. 9.

physical education of girls was almost *nil*. In the United States this matter has received considerable attention, and the system of physical training of girls is being improved every year. Indeed, it cannot be too strongly insisted upon that games and exercises which strengthen the muscles, enlarge the chest, and assist all the digestive operations, are not only as beneficial to girls as to boys, but need to be made ever more a special study in the case of the former, since girls do not spontaneously attend to this part of their education with the energy of the other sex.

It has been said that when you educate a boy you may be training a man, but when you educate a girl you may be educating a family. It is useless to press the claims of health and physical training, to aim for better bodies and higher physical development if the future mothers are not considered. Their physical training is of more importance than that of man.[153]

Hence, the first aim, which should dominate physical education should be health—a momentous word that looms up beside holiness, to which it is etymologically akin. Only those who realize what advances have been made in health culture, especially since the days of Locke, and know something of its vast new literature can realize what this means. The health of woman is, as we have seen, if possible even more important for the welfare of the race than that of man, and the influence of her body upon her mind is, in a sense, greater, so that its needs should be supreme and primary. Foods should favor the completest digestion, so that metabolism be on the highest plane. The dietary should be abundant, plain and varied, and cooked with all the refinements possible in the modern cooking school, with limited use of rich foods and stimulating drinks, but with wholesome prox-

[153]Knauff, T. C., Athletics for Physical Culture, p. 395.

imity to dairy and farm. Nutrition is the first law of health and happiness.[154]

The principle sometimes advocated, that the same methods of physical training should apply to boys and girls without regard to sex, should be reversed and every possible adjustment made to sex. Free plays and games should always have precedence over indoor or uniform *commando* exercises. Boating and basket-ball should be allowed, but with the competition element sedulously reduced, and with dancing of many kinds and forms the most prominent indoor exercises. Golf and tennis are games that should hold a place in the physical culture of our girls.[155]

Speaking of the influence of carriage and dress on digestion, Dr. Stockton states that one of the most common causes of sluggishness in hepatic circulation and secretion, as well as of the disturbances of the intestines and other portions of the digestive apparatus, may be attributed to faulty carriage of the body and relaxation of the abdominal muscles, lessening the abdominal type of respiration, and consequently the loss of diaphragmatic motion. All of these conditions are very much aggravated, and some of them are directly induced by the improper dress almost universally adopted by women, and to some extent by children.

Now, for the correct performance of function on the part of the stomach, liver, and intestines, it is necessary that free and properly selected movements of these organs should take place. Such movements are impossible in the majority of women. The defects are so common, and the deformities of the body necessarily associated with them, begin so early in life, that they are largely overlooked, and are argued to be natural and beautiful by the mass of womankind.[156]

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[154] Hall, Adolescence, Vol. II, p. 637.
[155] Ibid, p. 638.
[156] Cf. Pyle, op. cit., pp. 45, 46 ff.

Locke's criticism of "strait-lacing"[157] is sustained by our present-day scientists. Thus, Dr. Stockton affirms that this condition more than any other cause is responsible for the constipation, backache, debility, biliousness, early loss of complexion, headache, and that long list of ailments of which so many women in all civilized countries are victims.[158]

In conclusion we say that the adjustments called for to secure adequate physical education for all boys and girls, are difficult and will tax the resources of all available educative agencies. "The very virtues of civilization," says Dr. Bagley, "impose upon everyone who lives the social life the paradoxical obligation to break nature's laws. How to get the most out of life with the least suffering, how to do the best work with the least drain, how to be human and civilized and still to be a healthy animal, are problems that can only approximate solution through comparison. When the best life entails no physical suffering, when the best work can be done without danger of nervous breakdown, when civilization and culture fail to demand some violation of primitive laws, man will have developed into a being that will have little bodily resemblance to his present self."[159]

To Locke is due the credit of being among the first to give due attention as well as consideration to the care of the physical well-being of the child. Personal experience, no doubt, contributed largely to the high value he placed upon the health of the body, and wrought in him a ready sympathy for the physical weakling for whom he sought strength and vigor in a clean, simple, and natural mode of life. That his theories will here and there fall short in the light of present developments in the science of physiology, hygiene, and physical train-

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[157]Sec. 11.
[158]Vide Pyle, op. cit., p. 48.
[159]Bagley, The Educative Process, p. 336.

ing, is to be expected. But if we disregard a few minor points, such as his insistence on "leaky" shoes, we shall find that his prescriptions of a plain diet, fresh air, plenty of sleep, proper clothing, and hard beds, need as much emphasis today as in Locke's time, and the passing moods and tempers of children, that teachers must reckon with, are facts as important now as then.

CHAPTER IV

Criticism of Locke's Theory of Moral Training

Locke says "the great principle and foundation of all virtue and worth is placed in this: That a man is able to *deny himself* his own desires, cross his own inclinations, and purely follow what reason directs as best, though the appetite lean the other way."[160]

Having pointed out the ways in which he considered that the body could be best fitted "to obey and execute the orders of the mind," Locke proceeded to set forth his views as to the ways in which "to set the mind right, that on all occasions it may be disposed to consent to nothing but what may be suitable to the dignity and excellency of a rational creature."[161]

Thus we see that the foundation of moral training is habit, which must, later on, qualify the child to obey his reason. The basis of all virtue is *the ability to practice self-denial;* hence, children should not be given anything simply because they desire it vehemently. They should, on the contrary, achieve the permanent experience that ardent desires are followed by denial and privation. Whilst the reason of the child is, as yet, unable to distinguish, the authority of the intelligent parent should intervene. If respect for parental authority is early developed, reasonable indulgence can be allowed to hold sway. The esteem, and the loss of esteem of the family and relatives, are the means that should be used to induce children to do well, until they arrive at the point of acting virtuously in order to satisfy the sense of duty. Blows and servile punishments should be avoided; these repress the spirit. If such means are used to force children to do what is right, they will not do it out of inclination, but only to avoid a greater evil. In like manner, re-

[160] *Thoughts*, Sec. 33.
[161] Sec. 31.

wards may induce children to do what we desire of them, simply through avarice and sensual pleasure.

Locke says, "I place *virtue* as the first and most necessary of those endowments that belong to a man or a gentleman; as absolutely requisite to make him valued and beloved by others, acceptable or tolerable to himself. Without that, I think, he will be happy neither in this nor the other world."[162] Although Locke considers *virtue* the first and most necessary of those endowments that belong to a man or gentleman, he urges its absolute necessity on the ground of utility. For if he possess not virtue, he cannot be valued and beloved by others, and hence the motive for practicing virtue is the *Ego*. It is true that Locke adds that without virtue, man would not be happy here or hereafter. However, the utilitarian motive is primary, while the supernatural aim is obscured.

Locke, in inculcating the acquisition of virtue, seems to have in mind,

(1) "Self-restraint." He says, "as the strength of the body lies chiefly in being able to endure hardships, so also does that of the mind. And the great principle and foundation of all virtue and worth is placed in this, that a man has to deny himself his own desires," etc.[163] "He that has not a mastery over his inclinations, he that knows not how to resist the importunity of present pleasure or pain for the sake of what reason tells him is fit to be done, wants the true principle of virtue and industry and is in danger never to be good for anything."[164]

(2) Submission to the authority of parent and teacher. "Would you have your son obedient to you when past a child? Be sure, then, to establish the author-

[162]Sec. 135.
[163]Sec. 33.
[164]Sec. 45.

ity of a father as soon as he is capable of submission."[165]

The first step in moral training is to make the child gradually familiar with the idea of God as Creator and Ruler of the Universe. The next step is to teach the habit of daily prayer.[166] Then, keep him strictly to speak the truth, and by all ways imaginable inclining him to be good natured.[167] Here, he observes that "all injustice generally springs from too great love of ourselves and too little for others." These are general principles. For the rest, "as the child grows up the tendency of his natural inclination must be observed," and the particular virtues must be developed, and remedies for the particular vices applied according to the child's nature."[168]

The virtues inculcated express and advocate the true ideal of human nature. "The solid and substantial good," "the glory and strength" of man, his only essential happiness, the excellence which makes a man "valued and beloved by others and acceptable or tolerable to himself."[169]

Locke defines habit as "that facility in doing anything which is acquired by practice,"[170] and also "The power or ability in man of doing anything, when it has been acquired by frequently doing the same thing."[171]

Now, in the development of the Christian character, and therefore in the formation of the typical youth, habit has a rôle of surpassing importance. It must transform instinctive behavior, and make it the servant or the ally not only of right reason and ethical conduct, but of a life conformed to Christian standards. In the accomplishment of this task, there are successive stages of perfection to be attained according as the essence of

[165]Sec. 40.
[166]Sec. 136.
[167]Sec. 139.
[168]Ibid.
[169]Sec. 70.
[170]*Thoughts*, Sec. 66.
[171]Essay Concerning Human Understanding, Vol. 1., p. 387.

the new habit is concerned with the substitution of a new feeling for the old instinctive attitude, or a new response, or a new object for both feeling and response. After the example of his divine Master, the Christian youth must be able to say: *Behold I make all things new.*[172] The first element is the sensory impression, which is also the indispensable condition of the other two elements, so in the acquisition of Christian virtue, the first requisite is a knowledge of the truths of faith.

Again, the law of habit reigns in the moral order as truly as the law of gravitation in the physical. The most difficult things become easy in time. It would be as difficult for a saint after long habits of virtue suddenly to fall into mortal sin, as it would be for a man living for years in habits of vice suddenly to become a saint. The law of habit presses upon the will, driving it into the channel which it has cut for itself, and making it more and more difficult to divert its course.

Habit can only be conquered by habit. The youth must form good habits to conquer bad, habits of resistance to overcome cowardly habits of surrender. It is not by violent and spasmodic efforts at self-assertion that he will overcome, but by steady and unremitting efforts at perseverance.

Locke does not strictly define virtue in the *Thoughts.* In the Essay, two definitions are given.[173] (1) "Virtue is the best worship of God." (2) "If virtue be taken, as most commonly it is for these actions, which according to different opinions of several countries are accounted laudable." These words may be taken as Locke's formal definition of virtue. The supernatural element is ignored in the definition. It is only in the opinions of several countries that acts are constituted virtues. It is no concern of Locke's whether God does or does not

[172]Apoc. XXI. 5.
[173]Vol. I, pp. 82, 83.

approve such acts. His idea is to bring up the child according to the natural or egotistic conception of virtue. Such was the practice of the pagan philosophers of old, who practiced virtue that they might be esteemed by men.

Virtue, taken in its widest sense, means the excellence or perfection of a thing, just as vice, its contrary, denotes a defect or absence of perfection due to a thing. Virtue, in its strictest sense, as used by moralists and theologians, signifies a habit superadded to a faculty of the soul, disposing it to elicit with readiness, acts conformable to our rational nature. Virtue has this in common with vice, that is, it disposes a potency to a certain determined activity; but it differs specifically from it in that it disposes it to good acts, *i. e.*, acts in consonance with right reason. We distinguish virtues, as intellectual, moral, and theological.

An intellectual virtue is a quality of the natural order. This quality may be *speculative,* as wisdom, science, understanding; and *practical* as art and prudence. And moral virtue is that which perfects the appetitive faculty.

We distinguish between intellectual and moral virtues. Intellectual virtue gives the facility, whereas moral virtue not only gives the facility, but the right use of facility. Justice, fortitude, and temperance, are moral virtues. Moreover, moral virtue regulates man in his dealings with others, as justice, fortitude, and temperance. It also regulates man in regard to his inner passions, as temperance and fortitude.

A theological virtue is that which includes supernatural, as well as natural, happiness. It is that power which secures to the individual natural happiness, which is attained by his own natural powers. The theological virtues are faith, hope, and charity. They are called theological, (1) because they have God for their imme-

diate and proper object; (2) because they are divinely infused; and (3) because they are known only through divine revelation. A theological virtue is the perfection of the intellect, faith; the perfection of the will, hope; and intellect and will combined, charity.

Virtue is not merely an external appearance, but an intrinsic reality. It does not make men act well "in order to be seen by men, but out of respect for the moral law."[174] Whereas habit is the result of performing an action out of custom.

Now, the virtues which Locke advocated have for their motive no distinctly religious or Christian consideration. His principle is utilitarian, *i. e.*, for the benefit of the individual, as may be gleaned from his words, "I place virtue as the first and most necessary of those endowments that belong to a man,"[175] etc. Here it is obvious that the social benefit of virtue, by which a man is "beloved by others," is subordinated to individual happiness. This note is placed in the very first part of the *Thoughts* as stated above.

In the second place, Locke touches on the social value of virtues, especially when he is speaking of those virtues which are part of good breeding. This thought might be expressed in present day phraseology, by stating that the educated man fits naturally and easily into his environment. Thus, when speaking of "contradictions," "captiousness," and the like, he again refers to "not losing the esteem of others,"[176] "being both welcomed and valued everywhere." But, here again, he subordinates the social to the individual interest; "power and riches, nay virtue itself, are valued only as conducing to our happiness."

Again, when speaking of the virtue of obedience,

[174]Dubray, Introductory Philosophy, p. 360.
[175]Sec. 135.
[176]Sec. 143.

Locke seemingly places it on a basis of mere utility or convenience. He says, "would you have your son obedient to you when past a child? Be sure, then, to establish the authority of a father as soon as he is capable of submission, and can understand in whose power he is."[177] He judges it "reasonable" that children, when young, should look upon their parents "as their lords, their absolute governors," so that, in mature years, they should love and reverence them. There is, then, question only of obedience to parents, no allusion to obedience to God and His Commandments. There is lacking that supernatural motive which makes obedience meritorious for eternal life. Nor is there any explicit reference to any sanction, except reasonableness and utility. This last is made clear, where the aim is stated to be "to make them capable to deserve the favor of their parents and the esteem of everybody else."[178]

The virtue of charity, he reduces to humanity and civility. While he speaks of inculcating a knowledge of God, and the need of teaching children to pray to Him, he has nothing to say about the love of God.[179] Now, we know from a Christian viewpoint that the love of God is the foundation of true charity. It is this love of God that has made the heroes who withstood the persecutions of the emperors and thus became saints. It is this love of God that induces so many men and women to consecrate their lives to God and labor with a heroic zeal for the salvation of souls in every part of the world. It is this love of God that caused St. Augustine to say, "Love God, and then do as you please."

For, it has been well said, "He who believes humanity requires no higher influence than its own, will see in Christ no more than a man like himself; he who

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[177]Sec. 40.
[178]Sec. 41.
[179]Sec. 136.

thinks man's only need is an example, will look upon Him as a good moral teacher. But he who feels that the need of his nature is something more than nature can supply, will seek for the supernatural in Christ.''[180]

Locke's presentation of charity falls below the high Christian ideal and gives us merely the model of some stoic philosopher, whose egoism consumed the charity which should have filled his heart for his fellow man. Locke's charity is cold and without result. It would never gain happiness hereafter.

In regard to the virtue of self-control, Locke urges that it should be commenced early. Parents should not allow their affection to degenerate into foolish fondness for their children.[181] This again he puts on a practical and utilitarian basis. ''He that is not used to submit his will to the reason of others, when he is young, will scarce hearken or submit to his own reason when he is of an age to make use of it.''[182]

How vastly different is the Christian conception of self-control. ''Self-discipline,'' writes Maturin, ''must necessarily be in proportion to the misuse of any sense of power, but it is the true use of it that we aim at in every act of self-discipline. 'For the joy that is set before us we endure the cross'—we do not endure it merely for its own sake, but for what lies beyond it. And we bear those acts of self-denial and self-restraint because we feel and know full well that through such acts alone can we regain the mastery over all our misused powers and learn to use them with a vigor and a joy such as we have never known before.''[183]

In his discussion of virtue, Locke hardly ever refers to the good of others, save to allude to virtue's reward

[180]Quoted by Maturin, Self-Knowledge and Self-Discipline, 2nd Ed., p. 81.
[181]Sec. 35 ff.
[182]Sec. 36.
[183]Op. cit., p. 59.

in the "favor of parents and esteem of everybody."[184] In one passage, indeed, he says that "the true principle which will constantly incline them to the right" is "an apprehension of shame and disgrace."[185] The motive here presented by Locke is quite human and will not tend to raise man above the natural. Whereas the Christian ideal is nobler and takes for motive the supernatural, and makes all natural considerations subservient thereto. The thought of practicing virtue for God's sake gives an impetus to the Christian man, and makes him realize that his reward is not in men's approbation, and hence he feels that he is what he is in God's sight despite man's judgment. But, when he treats of good breeding, Locke naturally recognizes the social side of this quality. As it is a rule of good breeding "Not to think meanly of ourselves," so it is also a rule "not to think meanly of others."[186]

We should strive "to please" and "to show respect" to others; we should try to put others at their ease, and, what "lies deeper than the outside," we should show "general good will and regard for all people." We should "accommodate ourselves to those we have to do with," not slight them, not find fault with them, not make fun of their faults (raillery), and should not be censorious, captious, nor excessively ceremonious.[187] All this Locke seems to put on a basis of social justice, when he says: "The thing they should endeavor, and aim at in conversation should be to show respect, esteem and good will, by paying everyone that common ceremony and regard which is in civility due to them."[188] This is "of use in civil life." This conception is worldly and pays no heed to the great commandment of the

[184]Sec. 41.
[185]Sec. 56.
[186]Sec. 141.
[187]Sec. 143.
[188]Sec. 144.

Great Teacher, "Love one another, as I have loved you." What a contrast there is between Locke and Faber in the matter of the lesser virtues. Father Faber, in his *Conferences on Kindness,* treats of kindness in words, thoughts, and acts, and develops the thought from a sympathetic, human viewpoint and bases his development on the true principles of Christian Charity, having the supernatural element in the foreground. Locke merely considers the man as man without a tincture of the supernatural. Locke would have a polished gentleman and Faber, a Christian gentleman. Locke has in mind only the gentleman as he would shine in polite society, whereas Faber would have the Christian gentleman appear as he is in the sight of God. With Faber the Christian gentleman has an upright conscience and therefore his justice should be superior to that of the worldling, and in conformity with Christ, the great Model.

But there are other parts of Locke's theory of moral training to be considered, namely, those bearing on faults. Thus, childish levity, he says, cannot be deemed deserving of punishment. If the child does anything incorrectly or improperly, have him do it correctly and repeatedly. Too many rules are detrimental to the authoritative command. Their very multiplicity tends to confuse the child to the extent of obscuring the distinction between the important and unimportant.

Examples should lead them on to correct behavior, but a certain amount of freedom should be allowed. Care should be exercised in the selection of company for children, because of the facility with which they imitate what they see. For that very reason, we ourselves should not give them the example of loose morals. Locke is correct, for example is a powerful influence for good or evil, and hence both parents and teachers should carefully guard themselves in presence of children. What

they see their elders doing they naturally conclude that they, too, have the privilege of imitating. Hence the warning of the Saviour about giving scandal to little ones.

Moreover, study should be made attractive to children by permitting them in the beginning to learn only such things to which they are inclined, or for which they are in the right humor; but they should soon be accustomed to control their inclinations, and to go at their work, even when it has little or no attraction for them. However, parents and teachers should not allow children to follow their humors, even from the beginning, because to do so would render the acquisition of control difficult later; repression or restraint by the teacher might then be regarded by the child as an infringement upon his liberty.

Impassioned reproofs are bad. Only stubbornness and perverseness should be treated with rigor. But once the temper of the child is broken, kindness should prevail. Children should be given a reasonable talking to as soon as they are capable of profiting thereby. It is well to direct them to observe the way other people act, in order that they may draw profit therefrom. If anything blameworthy is noticed in them, they may be led to see their faults by observing the estrangement of those around them; here the sense of shame should influence them. The father should exercise great care in selecting a tutor for his son. The tutor should have a broad and deep knowledge of human nature, for it is his duty to acquaint his pupil with the errors and vices of the world that he may guard himself against them. Locke is in harmony with our best principles on this point. We feel prompted only to add to his tutor's qualifications, that acquaintance with psychology and child nature, so necessary for the right understanding, and treatment of the young. While Locke did not pos-

sess a sufficient knowledge of psychology, he had sound common sense and keen observation, as his counsels show. For instance, his teacher must study the character or rather the temperament of the pupils, in order to govern and guide them rightly. He should never forget that no two pupils are exactly alike in temperament, and hence he cannot hope to treat them alike.

Locke rightly says that a spirit of dominion should be opposed, and the desire to know encouraged. The latter is accomplished by taking the pupil away from a useful occupation, while he still takes delight in it, in order that he may later return to it with pleasure, as if to recreation. Thus, we introduce variety into his occupations, and the one is used as a rest from the other. This thought recurs repeatedly in the book. Its application, too, is seen in the advice not to permit children to continue a useful occupation in which they take great satisfaction until they become disgusted with it and long to return again to something else. In taking such measures, the educator's aim is to associate what is good and desirable with impressions of pleasure, as well as to associate what is to be avoided as bad, with the thought of pain. Sensitive children must be hardened. Curiosity must be gratified in so far as that can serve to enlighten their understanding. The child's mind is extremely active and longs to be at something new. The successful teacher closely studies the bent of the child's mind and hence provides for that activity by assigning different tasks. Nervous children easily become restless and seek for change and variety. The teacher will provide such opportunities as they need. As the child is naturally curious, the teacher will strive to direct such curiosity into the proper channels. Once that is accomplished, teaching becomes a pleasure and the pupils make progress. It stands to reason that certain morbid curiosities should be repressed and can never be encouraged. For-

bidden pleasures are generally sought after, and hence it is that the prudent teacher should be on his guard at all times. One careless slip may entail serious consequences and perhaps bring moral shipwreck to the child.

Summary

Locke's aim in moral training is to develop character, and while he, in general terms, speaks of the knowledge of God, the practice of daily prayers, he is, nevertheless, very vague. Religion is apparently the least essential, while all that tends to make a gentleman is primary.

There is no doubt about Locke's high estimate of moral worth, for he insists that the child should acquire virtue and shun vice. From a utilitarian standard he shows the great benefit of virtue, of manly conduct, and correct principles of living. He urges the tutor to be exemplary and to avoid whatever may leave a false impression upon the child. He teaches, moreover, that a virtuous life is to be preferred to all else, and that the qualities that make the gentleman should be carefully cultivated. With all this, however, Locke's ideal is not of that ennobling quality which a Christian philosopher would have demanded. Christ, the great Exemplar, is never once mentioned, much less presented as a model. When Locke appeals to the conscience of the child, it is reason only that speaks, the voice of his Maker is not heard. When he extolls conduct as a means to win esteem and commendation, the Divine Will is left out of view. Such a moral system is in danger of becoming thoroughly utilitarian and rationalistic, if not materialistic.

CHAPTER V

Criticism of Locke's Theory of Intellectual Training

1. From the standpoint of Genetic Psychology and in the light of the conflicting empirical and rationalistic tendencies of his philosophy.
2. Criticism of the soundness of his Theory on the separation of Mind and Body and his disregard of hereditary powers and tendencies.

In our analysis of his *Thoughts Concerning Education,* we have shown that the characteristic feature of Locke's Theory of Education is his complete disapproval of the matter and method prevailing in the systems of his day. The scholastic atmosphere of Westminster and of Oxford, where Latin, Greek, Hebrew, Arabic, Logic, and Metaphysics constituted the major part of the curriculum, does not appear to have been congenial to his nature. There were, no doubt, many kindred minds who felt as he did, but, then as now, they are few who boldly speak what others scarce dare think in private. Lord Verulam's example, "who, not servily thinking learning could not be advanced beyond what it was, because for many ages it had not been, did not rest in the lazy approbation and applause of what was, because it was, but enlarged his mind to what might be,"[189] seems to have stimulated Locke's courage as well as ambition to advance his own theories and independent views of knowledge. Indeed, Locke's opinions and conclusions do not appear so much the result of conscious, explicit, and deliberate investigation, wherein all the antecedents and concomitants have been taken due account of, but rather the subconscious generalizations gradually arrived at by his reactions to the conditions prevailing in his time and day. To him the study of language was nothing but the

[189] *Conduct,* Sec. 1.

study of words, while his spirit grew weary of symbols in place of thoughts, and his independent spirit revolted against the didactic methods which communicated knowledge to the young in the indirect, roundabout way, through the authority of others. To Locke the declamations and disputations in the schools, whereby the youth were made to imbibe the wisdom of the ancients, appeared atrophy and stagnation. His view of human knowledge was genetic and he sought to apply this view to the aims and methods of education. When he advocated a private tutorship under parental supervision, it was because he entertained no hope of being able to influence school authorities of his day to try his ideas. He stood alone when compared with such educational reformers as St. de la Salle and St. Ignatius, who, members of the greatest teaching agency in the world, The Catholic Church, by her sanction and authority, established teaching bodies, through whose labors their theories and reforms were made not only fruitful and permanently practical, but found likewise their further development. Locke's theory has never been generally applied, and, in view of its incompleteness and inherent weakness, we may well doubt that it will ever be tried as it stands.

In the light of present developments, Locke seems to fall as far short of ideal standards as he was in advance of his own time. He proceeds from the principle that all ideas come immediately through the senses. We would expect, therefore, to find in his curriculum and method more immediate contact between the object and the learner in the form of object lessons, nature study, laboratory exercises. We would expect to find everywhere an appeal to the senses: sight, hearing, touch, the muscular and motor senses.[190] Yet we find books the great instrument to which Locke constantly refers.

[190]The first modern writer to treat psychology empirically was not likely to overlook the necessity of training sense experience. Thus,

He does, indeed, insist that we begin with the concrete, with "things that fall under the senses and require little more than memory,"[191] yet the study of "minerals, plants, animals and, particularly, timber and fruit-trees, their parts, and ways of propagation, . . . but more especially geography, astronomy, and anatomy,"[192] all of which by their very nature, demand observation and experiment, are not made the direct and primary object of study, but are grafted upon (the study of) a dead language in order to mitigate its barrenness. The only sense appealed to is the auditory through the unfamiliar sounds of a strange language. It would be hard to find a more difficult, if not impossible way from object to intellect than such a procedure. These objects appeal directly to sight and the tactile and muscular sense. Words, being arbitrary symbols of ideas, have no power in themselves to convey ideas or materials for thought. An impressionist might as well paint the beauties of grand opera for the benefit of the deaf.

Locke's acquaintance with the natural sciences of his day appears to have been that of the fashionable amateur solicitous about the fitness of his "conversations" and looking after the gratification of a superficial curiosity.[193] He admires Newton's mathematical applications and demonstrations in the domain of astronomy and physics as holding out the chief, if not the only hope of results truly scientific.[194]

Vives declares "the senses open up the way to all knowledge," and again, "whatever is in the arts, was in Nature first, just as pearls are in shells or gems in the sand." It could hardly be expected that Vives should have thought out a scientific method of investigation, when two generations later, Bacon failed to establish that new instrument of research, which should infallibly rise from being the servant of nature, to becoming her interpreter, and thence proceed to bring her into subjection. "The senses are our first Teachers." (Watson's Vives on Education. Introduction, p., cxiv.)

[191]Cf. *Thoughts*, Sec. 166.

[192]Cf. Ibid, Sec. 169.

[193]Ibid, Sec. 193.

[194]Cf. Sec. 194.

He says, "I think the systems of natural philosophy that have obtained in this part of the world, are *to be read* more to know the hypotheses and *to understand the terms and ways of talking* of the several sects, than with hopes to gain thereby a comprehensive, scientifical and satisfactory knowledge of the works of nature."[195] Here again we have reading, but nothing in the line of observation or demonstration, though from among the writers on these subjects, he recommends rather such "As have employed themselves in making rational experiments and observations than in starting barely speculative systems."[196]

With Locke, geography is but the study of a sphere of land and water, divided and subdivided by mathematical and political boundary lines; the history of the terrestrial sphere, its structure, the processes whereby it became what it is today and the conditions that render it fit as man's habitation, are questions that do not enter his science.[197] To him the bodies of the solar and stellar systems are but masses of matter whose motions and positions are mathematically determined—their life-history, the explanation of the changes they undergo, their confluence, thermic, optic, magnetic, electric—these are questions that do not occur to Locke.

Traveling, preeminently suited to bring the student into direct contact with the objective world, through the eyes especially, and thus provide us with knowledge at first hand, has for Locke's pupil but two advantages: "first, language; secondly, an improvement in wisdom, and prudence, by seeing men, and conversing with people of tempers, customs and ways of living, different from one another, and especially from those of his parish and neighborhood."[198] Pictures to accompany elementary

[195]Sec. 193.
[196]Ibid.
[197]Cf. Sec. 178.
[198]Sec. 212.

reading and globes for the study of geography are the only equipment his curriculum and educational processes call for.

Locke may be pardoned when he overlooks altogether the training of the sense of smell, though the wisdom of such neglect might be questioned by the chemist, the pharmacist, and the physician.

The sense-training through vocal and instrumental music is either ignored or discouraged,[199] and as far as Locke is concerned, we are to be without the aesthetic enjoyment of music, and the other arts with all their inspiration and stimulus of high thinking and noble living.

The first seven years of school life, corresponding approximately to the years spent in the grammar grades, are the most favorable periods for training in sense-perception. All the senses seem to be eager to reach out for materials of knowledge, in order to satisfy an innate longing. All the agencies of a well-planned curriculum that make for sense-training, should be utilized to the full extent: Kindergarten, object-lessons, nature-studies, elementary science, penmanship, drawing, vocal music, gymnastics, and games. Maps, charts, lantern slides, drawings, diagrams, models, will help to place such subjects as history, language, and arithmetic on a sense-basis.

But in place of such a program, Locke sets his pupil upon the study of foreign languages. He advocates that, "As soon as he can speak English, 'tis time for him to learn some other language. This nobody doubts of, when French is proposed."[200] He adds, "When he can speak and read French well, which in this method (the colloquial) is usually in a year or two, he should proceed to Latin."[201] And this, notwithstanding his ut-

[199]Sec. 197.
[200]Sec. 162.
[201]Sec. 163.

terance that the learning of Latin is "nothing but the learning of words, a very unpleasant business to young and old,"[202] and his insistence elsewhere[203] that thought comes before the expression.

It is difficult to agree with Locke as to the method and aim as well as to the time of teaching foreign languages.

From the standpoint of development, what has the student gained by the mere ability to express the same set of thoughts by means of several sets of phonetics? This the young learn readily during the years when plasticity is at its maximum. The number of words and modes of expression needed for their limited circle of thoughts is very small when compared with that of the educated man, and we are easily induced to over-estimate the magnitude of the results. Unless a new language introduces the student to a new circle of thought to which he would otherwise be a stranger, what has he for his labors in the acquisition of the new tongue, save the exercise of his mental powers, which he might as well have exercised to better advantage in a more direct pursuit of truth.

Literature as the expression of the intellectual and moral life of a people should be made the chief educational aim of language-study, and the value of this literature must depend on the quality of the mental and moral life of a people as expressed in the content and structure of their language and literature. We do not, however, understand a language until we grasp its structure and this cannot effectively be attained by the colloquial method, which appeals only to the auditory sense and the sensile memory. The "hit and miss" method of learning is wasteful of time and energy, and is as liable to inculcate faulty habits as correct ones. Locke

[202] Sec. 169.
[203] Cf. Sec. 171.

argues that the conversational method is the way we learn our mother tongue. But by the time a pupil is ready to commence the study of foreign languages profitably, which is generally regarded as the first year of high school, he is no longer a babbling infant, devoid of judgment and the power of generalization, and hence cannot be taught to advantage by the methods suited to the child of six, seven or eight years. Grammatical rules are generalizations arrived at from the study of concrete forms, and serve as a convenient summary for a large number of particulars which would otherwise be a dead load upon the memory. Economy requires the grouping together of similar elements with which the pupil is familiarized by colloquial, reading, and writing exercises, and the whole experience finally summed up into a few grammatical laws. The fundamental principles of sentence structure being similar in all languages, the study of foreign tongues by this method becomes directly helpful in grasping the structure of the mother-tongue, particularly if we join thereto exercises in translating from one into the other.

Writers on education generally agree with Locke in his disapproval of the practice, common in his day, of taxing children's minds with the rote memorization of their lessons. He is not averse to memorizing passages whose matter and form are of special import and aptness, "but their learning of their lessons by heart, as they happen to fall out in their books, without choice or distinction, I know not what it serves for, but to misspend their time and pains and give them a disgust and aversion to their books, wherein they find nothing but useless trouble."[204]

When viewed in the light of the practices of his time, Locke's position appears conservative, but recent years have brought the pendulum to the other extremity

[204]Sec. 175.

of the arc, as witness the wretched spelling and poor expression of classroom exercises. We speak and write by force of habit, not by conscious reference to the rules of grammar and rhetoric. Locke himself insists that we acquire this habit to the best advantage by the observation and imitation of the best models. Pupils spend one period a day in the formal study of their mother-tongue, but very often undo the results by careless practice during all their other lessons. The thought first, then the expression is the logical order, but the acquisition of the expression must follow immediately upon the acquisition of the thought, so that the two may be associated in consciousness, in such a way that the one will recall the other. As a matter of common experience we "think in words," and it is questionable whether or not we can either acquire or retain the thought without some expression. Furthermore, clearness and vigor of thought are closely related to clearness and vigor of expression.

A fitting expression means more to the thought than a well-made garment means to its wearer. When students have difficulty in expressing what they know about the subject, it will be well to remind them that suitable help may be found in the language of their text-books. Today we demand that both the thought and the language of the book that is to be placed in the hands of students shall be suitable to their capacity.

Apparently Locke does not believe that the memory can be improved by exercise. He states, "I hear it said, that children should be employed in getting things by heart, to exercise and improve their memories. I could wish this were said with as much authority of reason, as it is with forwardness of assurance, and that this practice were established upon good observation more than old custom. For it is evident, that strength of memory is owing to an happy constitution, and not to any habit-

ual improvement got by exercise. . . . The learning of pages of Latin by heart, no more fits the memory for retention of anything else, than the graving of some sentence in lead makes it more capable of retaining firmly any other characters. If such a sort of exercise of the memory were able to give it strength and improve our parts, players, of all other people, must needs have the best memories. . . .''[205] Here he seems to deny not only the transfer of the effects of memory practice, but his reference to actors would indicate that he doubts any specific improvement. General experience and observation as well as carefully conducted experiments do not agree with Locke's assertions.

From experiments conducted under the direction of Meumann, Radossawljewitsch found that special practice in memorizing improves memory in general.[206] General improvement in accuracy of memory was found by Miss Talbot in training her visual memory.[207] Specific improvement of memory as well as transfer of effect were found in experiments conducted by Bennett, Ebert and Meumann, Fracker, Sleight, Gamble, Book and Wallin.[208]

Since memory implies physiological as well as psychical dispositions, it must follow that the health of the body has an important bearing upon the functions of the memory. Mal-nutrition, worry, overwork, and fatigue are conditions to be avoided, if the memory is to function to advantage. In fatigue nerve cells shrink below normal size, their growth exceeds waste during hours of rest, especially during sleep. Carbon dioxide poison resulting from poor ventilation, seems to affect nerve cells more than any other part of the organism.

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[205] Sec. 176.

[206] Cf. Radossawljewitsch: Das Behalten und Vergessen bei Kindern und Erwachsenen nach experimentellen Untersuchungen. Leipzig, 1907.

[207] Attempt to train the Visual Memory. Am. Jr. Psychology, 1897.

[208] Cf. Coover, Psychological Monograph, January 1916, *Memory.*

These are conditions that teachers must take account of in the conduct of class work and in directing the study of children.

But the greatest improvement of memory is to be hoped for from teaching pupils proper methods of study. In this the process should be to secure first understanding, then memory. Let attention focus all the energy of the mind upon the object; make the first impression clear. This will save time and energy. Carelessness in the first reading or first presentation of a topic will form wrong associations, difficult to overcome by repetitions no matter how carefully made. Opening the camera a second time in the hope of obtaining a better impression will generally result in a blurred image. Above all cultivate a logical memory, connect things in reason, so that when forgotten they may be developed once more from fundamental principles. Such training will be of greater benefit in future life than the mere storing of the memory with a multitude of facts, no matter how useful in themselves. Reinforce such methods of teaching by making examinations consist largely of thought questions, questions that cannot be memorized from a book, but are implied, problems that involve new applications of familiar principles.

As Locke neglects the cultivation of the memory, so he ignores its aid and ally, the imagination. This is really implied in the neglect of sense-training, since it is the imagination that retains, reproduces, and combines the images acquired through the senses.

A cultivated imagination is not only a never-failing fountain of those enjoyments that come to us through an appreciation of the aesthetic arts: music, poetry, painting, sculpture, dramatics; but the very existence of these arts is dependent upon the imagination. Art speaks a universal language understood by all, the young and the old, the learned and the unlearned, and it reaches

its highest flight when its theme is inspired by religion. To Locke, music is not an expressive art, interpreting all the moods of the mind, and capable of stirring every passion and emotion in the human breast. "Music," he says, "is thought to have some affinity with dancing, and a good hand upon some instrument is by many people mightily valued. . . . I have amongst men of parts and business so seldom heard anyone commended or esteemed for having an excellency in music, that amongst all those things that ever come into the list of accomplishments, I think I may give it the last place."[209]

Locke's prejudice against poetry seems to have been engendered in Westminster School, where he was constrained to make endless translations from the classics. Verse-making became an exercise of utmost disgust and weariness, hence his contempt for, and low estimate of, poetry. His attitude toward poetry is more accurately expressed in his own words. He says, "It is very seldom seen, that anyone discovers mines of gold or silver in Parnassus. . . . Poetry and gaming, which usually go together, are alike in this, too, that they seldom bring any advantage but to those who have nothing else to live on."[210] And yet the pictures which the poet paints in large outlines afford us all the delightful exercise of filling in the details and colors, as taste inclines or capacity fits us, whether our fancy partakes of childhood's exuberance, is clothed in the roseate hues of youth, or has assumed the more realistic tone of full-grown manhood. In contrast with this strange attitude of Locke toward the poet and poetry, we may cite Cardinal Newman's appreciation: "It is the fire within the author's breast which overflows in the torrent of his burning, irresistible eloquence; it is the poetry of his inner soul, which relieves itself in the Ode or the Elegy;

[209]Sec. 197.
[210]Sec. 174.

and his mental attitude and bearing, the beauty of his moral countenance, the force and keenness of his logic, are imaged in the tenderness or energy, or richness of his language. Nay, . . . not the words alone, but even the rhythm, the metre, the verse, will be the contemporaneous offspring of the emotion or imagination which possesses him.''[211]

But the imagination serves not only the creative genius of the poet and the artist; the scientist, too, the inventor, and the mathematician are in need of the treasure fancy creates. Try to think of a Newton, a Galileo, an Edison, a Leverrier devoid of imagination, or a Darwin, a Virchow, a La Place or a Copernicus. As the mind directs the eye to see what *is,* so it directs the imagination to peer into the dark future to perceive what *might be,* and thus man has learned to harness the lightning and the water-fall, to sail the ocean and the air, to trace the secrets of unfolding life, and to destroy the germs that hasten death.

In view of Locke's doctrine concerning ideas, it is not surprising that we can find, in his educational theory, no deliberate attempt to develop in the child those mental processes of comparison, abstraction, and generalization by which the intellect apprehends the essential nature of things. To him, comparison and reflection result in notions of mental operations, not in mental content. And yet, nothing is more fundamental and essential to a sound mental development than the cultivation of the ability to distinguish the essential from the accidental, to seize the universal as illustrated in the particular, and to express it in clear definitions, definitions not memorized but induced. These processes are necessary not only as a mental economy, but without them science and art are impossible of development, and the teaching of science degenerates into an accumulation of an unas-

[211]Idea of a University, p. 279.

similable mass of particulars. Pestalozzi believes that "it is the chief business of education to pass from distinctly perceived individual notions to clear general notions."

With Locke abstraction is nothing else than the generalization of sense-images, by a process of combination and elimination of details, resulting in an image that is applicable to a whole class of individuals, because of its vagueness.[212] "The mind makes the particular ideas, received from particular objects, to become general, which is done by considering them as they are in the mind, such appearances, separate from all other existences, and of real existence, as time, place, or any other concomitant ideas. This is called abstraction whereby ideas, taken from particular beings, become general representatives of all of the same kind, and their names, general names, applicable to whatever exists conformable to such abstract ideas."[213]

"If we trace the progress of our minds, and with attention observe how it repeats, adds together, and unites its simple ideas received from sensation or reflection, it will lead us farther than at first perhaps we should have imagined. And I believe we shall find, if we warily observe the originals of our notions, that even the most abstruse ideas, how remote soever they may seem from sense, or from any operations of our own minds, are yet only such as the understanding frames to itself, by *repeating* and *joining together* ideas that it had either from objects of sense, or from its own operations about them, so that even large and abstract ideas are derived from sensation or reflection, being no other than what the mind, by ordinary use of its faculties, employed about ideas received from objects of sense,

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[212]Cf. Essay, Bk. III., c. 3, 9.
[213]Ibid, Bk. II., c. 11, 9.

or from the operations it observes in itself about them, may and does attain unto."[214]

It is in his doctrine concerning ideas that the rationalistic elements of Locke's philosophy come into sharp conflict with his empiric tendencies. Knowledge, in the true sense of the word, he tells us in his *Notes in Traveling,* depends on true and exact ideas, opinion on facts and history. Strict limits are set upon our mental reach; first, by the "want of ideas"; second, by the "want of discoverable connections between the ideas we have," and, third, by the "want of tracing and examining our ideas."[215] The simple ideas we receive from sensation and reflection are the boundaries of our thoughts; beyond which the mind, whatever efforts it would make, is not able to advance one jot; nor can it make any discoveries, where it would pry into the nature and hidden causes of those ideas."[216]

Locke distinguishes between "real" essences and "nominal" essences. "Real" essence "may be taken for the being of anything, whereby it is what it is. And thus, the real internal, but generally, in substances, unknown constitution of things, whereon their discoverable qualities depend, may be called their essence."[217] "Nominal" essences correspond to his abstract, universal ideas, and these, being the creations of our own minds, are, therefore, certainly known to us.[218] General or universal knowledge is possible concerning these universal essences only. He says, "For what is known of such general ideas, will be true of every particular thing, in whom that essence, *i. e.,* that abstract idea is to be found; and what is once known of such ideas, will be perpetually and forever true. So that as to all general knowledge,

[214]Ibid, Bk. II., c. 12, 8.
[215]Cf. Bk. IV., c. 3, 22.
[216]Bk. II., c. 23, 29.
[217]Bk. III., c. 3, 15.
[218]Cf. Bk. III., c. 3, 7, 15; Bk. IV., c. 3, 31; c. 4, 5.

we must search and find it only in our minds, and it is only the examining of our own ideas, that furnisheth us with that. Truths belonging to essences of things (that is, to abstract ideas), are eternal, and are to be found by the contemplation only of those essences; as the existences of things are to be known only from experience."[219] Locke illustrates his meaning by referring to the science of mathematics, which "if we will consider, we shall find that it is only for our own ideas. The mathematician considers the truth and properties belonging to a rectangle, or circle, only as they are in idea in his own mind. For it is possible he never found either of them existing mathematically, *i. e.,* precisely true, in life. But yet the knowledge he has of any truths or properties belonging to a circle, or any other mathematical figure, are nevertheless true and certain, even of real things existing; because real things are no farther concerned, nor intended to be meant by such propositions, than as things really agree to those archetypes in his mind."[220] Hence, the deductive sciences we have. But what about the *inductive,* the experimental sciences?

Concerning "real," objectively existing essences, whether material or immaterial, we can have no scientific and certain knowledge, first, because our senses fail to penetrate into that inner, essential nature of their being, which is the source of their properties and activity;[221] second, because in our ideas of them we cannot discover the connections and dependencies of the various causes and effects that operate in these bodies. He says, "In some of our ideas there are certain relations, habitudes, and connections, so visibly included in the nature of the ideas themselves, that we cannot conceive them separable from them by any power whatsoever. And in

[219]Bk. IV., c. 3, 31.
[220]Bk. IV., c. 4, 6.
[221]Cf. Bk. IV., c. 3, 25.

these only we are capable of certain and universal knowledge. Thus the idea of a right-lined triangle necessarily carries with it an equality of its angles to two right ones. Nor can we conceive this relation, this connection of these two ideas, to be possibly mutable or to depend on any arbitrary power, which of choice made it thus, or could make it otherwise. But the coherence and continuity of the parts of matter; the production of sensation in us of colours and sounds, etc., by impulse and motion; nay, the original rules and communication of motion being such, wherein we can discover no natural connection with any ideas we have, we cannot but ascribe them to the arbitrary will and good pleasure of the wise architect. . . . The things that, as far as our observation reaches, we constantly find to proceed regularly, we may conclude do act by a law set them; but yet by a law, that we know not; whereby, though causes work steadily, and effects constantly flow from them, yet their connections and dependencies being indiscoverable in our ideas, we can have but an experimental knowledge of them. . . . In these we can go no farther than particular experience informs us of matter of fact and by analogy to guess what effects the like bodies are, upon other trials, like to produce. But as to a perfect science of natural bodies (not to mention spiritual beings) we are, I think, so far from being capable of any such thing, that I conclude it lost labor to seek after it."[222] Again, "I deny not, but a man, accustomed to rational and regular experiments, shall be able to see farther into the nature of bodies, and guess righter at their yet unknown properties, than one that is a stranger to them; but yet, as I have said, this is but judgment and opinion, not knowledge and certainty. This way of getting and improving our knowledge in substances only by experience and history, which is all that the weakness of our facul-

[222]Cf. Bk. IV., c. 3, 29.

ties in this state of mediocrity, which we are in, in this world, can attain to; make me suspect, that natural philosophy is not capable of being made a science. We are able, I imagine, to reach very little general knowledge concerning the species of bodies, and their several properties.''[223]

Thus we see that Locke carries out his own empirical theories to the point where empirical science is declared impossible, and his rationalism leaves us only the deductive sciences, dealing with the purely subjective existences of his ''nominal'' essences.

Locke's views concerning the nature of the relation between soul and body will account in a great measure for the deficiencies of his methods of teaching, as viewed from the genetic standpoint. To him soul and body would seem to be distinct entities, holding to each other the relation of cottage and tenant, or of tool and workman.[224] All we have to do is to let nature mould the physical organism in her own fashion and when sufficient growth and strength are attained, it may be depended upon to render fit service to the mind. Sensations and sense perception are not the activities of the human composite, but purely physical activities and modifications which he can trace from their inception in the sense-organ, along the neural pathway to their terminus in the central nervous system. Here the mind takes up the activity though Locke cannot explain how the chasm is bridged between the physical organism and the immaterial mind. ''Impressions made on the retina by the rays of light, I think I understand; but motions from thence continued to the brain may be conceived; and that these produce ideas in our minds I am persuaded, but in a manner too incomprehensible. This I can resolve only with the good pleasure of God, whose

[223]Bk. IV., c. 12, 10.
[224]Cf. *Thoughts*, Secs., 2, 31.

ways are past finding out."[225] Again, he says, "As the ideas of sensible secondary qualities which we have in our minds, can by us be no way deduced from bodily causes, nor any correspondence or connection be found between them and those primary qualities which (experience shows us) produce them in us, so on the other side, the operation of our minds upon our bodies is inconceivable. How any thought should produce a motion in body is as remote from the nature of our ideas, as how any body should produce any thought in the mind."[226]

Through revelation, indeed, we know, that the soul can exist separate from the body, but of the modes of its activity as a separate entity we can have no knowledge. "The body," says St. Thomas, "is necessary for the action of the intellect, not as its organ, but on the part of the object; for the phantasm is to the intellect what color is to the eye."[227] All the activities of the soul or body have but one prime subject to which they are referred as to their cause, the Ego or self, which is neither the soul taken separately, nor the body taken separately, but the composite being arising from the personal and substantial union of the two. Hence, all the educative processes, both active and passive, whereby man is adjusted to the ideal as well as actual conditions of his life and his ultimate destiny, must be adapted to this human composite, of body and soul. We cannot educate the body and the soul independently, because they cannot act or be acted upon separately. Locke apparently believes the educative processes concern the soul only, the body receiving sufficient attention to keep it in health. He says, "Due care being had to keep the body in strength and vigor, so that it may be able to obey and execute the orders of the mind; the next and principal business is,

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[225]Examination of Malebranche, Vol. IX., Sec. 10.
[226]Bk. IV., c. 3, 28.
[227]Summa Theologica, P. I. Q., LXXX., a. 2, ed. 3, English Trans. p. 6.

to set the mind aright;"[228] "and though this be the principal part, and our main care should be about the inside, yet the clay-cottage is not to be neglected."[229]

All our ideas, he assures us, come through the senses, but the process is essentially a passive one. "The mind is wholly passive in the reception of all its simple ideas."[230] "In this part the understanding is merely passive; and whether or no it will have these beginnings, and as it were materials of knowledge, is not in its own power. For the objects of our senses do, many of them, obtrude their particular ideas upon our minds whether we will or no. . . . These simple ideas, when offered to the mind, the understanding can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones itself, than a mirror can refuse, alter, or obliterate the images or ideas which the objects set before it, do therein produce. As the bodies that surround us do diversely affect our organs, the mind is forced to receive the impressions, and cannot avoid the perception of those ideas that are annexed to them."[231]

Nevertheless, there are those who have eyes and see not, ears and hear not. For different persons placed in identical surroundings, though their senses be perfectly sound, will not receive the same sense-impressions from the same source. The individual without musical training does not receive all the impressions perceived by the artist, not merely because he approaches the performance with a totally different appreciative mass, but likewise because his sense organs are not sufficiently sensitive to respond to the more delicate stimuli. The statement that "education consists in the modifications of the central nervous system,"[232] expresses, at least, a part of the

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[228] *Thoughts* Sec. 31.
[229] Ibid. Sec. 2.
[230] Essay, Bk. II., c. 12, 1.
[231] Bk. II., c. 2, 25.
[232] Cf. Donaldson, The Growth of the Brain, p. 336.

truth. The quality or character of the nerve cells as well as the number and the character of the connections between them and between the different areas of the cerebral cortex constitute the neural basis of the learning process and they condition the psychical associations involved therein. The structure and function requisite for reflex or automatic action is inherited, but such as are required for the instinctive activities and, above and beyond, those that condition the highest functions of the intellect are subject to modification and dependent on development. The process of habit formation, involved in every learning process, entails the forming of continuous and free channels for the transmission of neural impulses and the blocking of divergent pathways. An educational theory, therefore that fails to take cognizance of considerations such as these, but attempts to treat the body and the soul as separate entities, must be unsound to that extent.

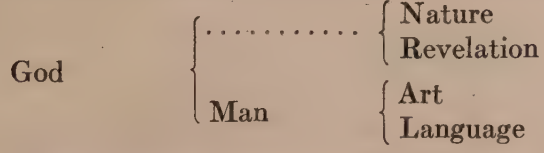
In his attitude toward the "natural aptitudes" and peculiar characteristics of children, as well as in his belief in the pliableness of their young minds, Locke recognizes a "design laid in nature," and foreshadows the modern doctrines concerning heredity and plasticity. "I imagine," he asserts, "the minds of children as easily turned this or that way, as water itself."[233] But "we must not hope wholly to change their original tempers, nor make the gay pensive and grave, nor the melancholy sportive, without spoiling them. God has stamped certain characters upon men's minds, which like their shapes, may perhaps be a little mended, but can hardly be totally altered and transformed into the contrary. He, therefore, that is about children should well study their natures and aptitudes, and see by often trials what turn they easily take, and what becomes them; observe what their native stock is, how it may be improved, and what it is

[233] *Thoughts*, Sec. 2.

fit for.'"[234] The biological sciences, which have aided greatly in classifying and generalizing the facts and phenomena involved in these individual variations found in children were not at Locke's disposal—in this case, practice ran ahead of scientific theory.

But more serious is Locke's neglect to transmit to the child the complete social heritage, which the race holds in trust for him. This transmission, though only a part of the educational aim, is, nevertheless, an essential function, for this heritage must supply the mental and spiritual food needed for the growth and development of the individual.

Dr. Shields in his *Philosophy of Education* represents man's spiritual inheritance diagramatically, thus:



God is the ultimate source of all truth and the Unity into which the various paths of truth must merge. His essence and being is the final answer to which all man's philosophical enquiry must lead, directly through nature or revelation, or more circuitously through the intellect of the race as it has expressed itself in art or literature. The interdependence of nature, revelation, art, and language obviously flows from their very nature. Inasmuch as art and language are but the outward expression and embodiment of human thought and feeling, they must depend on nature (man included) and revelation; for, all that can become the object of man's thought is God and God's creation. Revelation in turn presupposes nature and language, and without nature, art is not possible.

In his scheme of education, Locke makes the certain

[234] Ibid. Sec. 66.

and scientific knowledge of nature impossible by reason of the destructive conflict of the rationalistic and empirical elements of his philosophy. He thrusts revelation into the background, and waits upon the development of the child's natural curiosity for a more complete enquiry into the supernatural. The arts are held in low esteem, and there is nothing left in the curriculum, but man and man's language.

Summary

To Locke belongs the credit of breaking with the rigid formalism pervading the educational systems of his time and of making an attempt to mitigate its narrow humanistic ideals. He endeavored to center the educational process about the child by suiting the curriculum and the methods of teaching to the nature and the needs of the pupil. When he takes account of individual tendencies and capacities, and expresses his belief in the waxen pliableness of the child's mind, he foreshadows the modern doctrine concerning heredity and plasticity. But Locke has no scientific knowledge of child nature, or of the laws of development of conscious life. Nor could he have; for, in the light of his own philosophy, knowledge about concrete, objective realities, whether of bodies or of spirits, is not possible. We may have general opinions, and a knowledge of individual facts, but not general or universal knowledge.

The pronounced empirical tendencies which the philosopher expresses in the beginning of Book II of his *Essay,* would have led us to expect a different attitude toward sense-training and the observational sciences. As a matter of fact, no rational attempt is made toward developing the power of observation; the imagination is neglected, and the memory is deemed incapable of improvement, except as far as health of body is concerned. He does, indeed, tell us that education should begin with

such things as fall under the senses, but forthwith he addresses himself to the sense of hearing, and that, too, in a strange tongue, about objects that concern the sight and the muscular sense.

During the years when memory and plasticity are at their best and when the child should be taught to take in the objective world about him through all the avenues of the senses, Locke confines him chiefly to linguistic studies. Poetry, music, drawing and painting that cultivate the imagination and afford perennial enjoyments of the higher type, find no fitting place in his educational plan. The cultivation of the reasoning powers is urged with great force and justice, but Locke is rather unfortunate in not assigning a more suitable place to logic, as embodying the laws in harmony with which we exercise our reasoning activities.

Perhaps the most serious short-coming in Locke's educational theory is his failure to transmit to the child that which is best in the social heritage. His philosophy would make the natural sciences impossible, and even when he treats of such things, as the earth or the heavens, he deals with them from the static, not from the dynamic viewpoint.

The expression of the beautiful in art is not appreciated. There is left man, his activities, and his literature; but the knowledge of God and of all those things requisite to enable the child to make the most important adjustment in life—the fitting himself for life eternal—receives but scant attention.

CHAPTER VI

LOCKE AND THE DOCTRINE OF FORMAL DISCIPLINE

In order to determine Locke's position with regard to the doctrine of Formal Discipline, we shall begin by defining our terms. The word *discipline,* in general, may be taken to signify *drill* or *training* whether physical, moral, or intellectual. Its purpose is to develop power, habit, and control. In this sense every educational process involves or should involve discipline. The term Formal Discipline is used in a more technical and restricted sense.

It is "the doctrine of the applicability of mental power, however gained, to any department of human activity."[235] This theory, based upon the Aristotelian "faculty" psychology, supposes that the power gained by the memory, the will, or the understanding in the pursuit of any study or activity can be used equally well in any other field of human endeavor. Though implied in the educational practices of the Greeks and the Romans, who believed a course in gymnastics, music, and oratory, the most suitable preparation for the demands of life, the doctrine of Formal Discipline did not take definite shape until the seventeenth century. During the Middle Ages, Latin had been the language of the learned and the key to the best that was worth knowing in literature, rhetoric, law, medicine, mathematics, and philosophy. It was the garb in which the ancient world had transmitted to posterity its intellectual heritage. But with the development of the modern vernaculars and their gradual substitution as the medium of expression in the various departments of human thought, the universal and pressing necessity of the classical languages was no longer

[235]De Garmo in Baldwin's Dictionary of Philosophy and Psychology.

felt in the same degree, and the claims of realism became more insistent. Their retention and the continued emphasis upon them, though no longer justifiable solely on the grounds of content of knowledge, was now justified on this new theory.

"By the seventeenth century," says Monroe, "the linguistic and literary curriculum had become traditional, with the authority of the learning of two centuries behind it and with a scholastic procedure which in details of method and curriculum, in the entire technique of the schoolroom, had never been equalled by any previous system of educational practice. . . . Since this narrow humanistic education no longer had any direct connection with the practical demands of the times and no longer offered the sole approach to a knowledge of human achievement and thought, a new theory must be found to justify its perpetuation. This new theory was, in a word, that the important thing in education was not the thing learned, but the process of learning. In respect to this principle, the new education was but a revival of the formalism of mediaeval scholasticism.

"The mind as a bundle of faculties was to be developed by exercising these various powers upon appropriate tasks whose value consisted in the difficulties they offered. These faculties were considered to have no necessary connection with one another, hence these disciplines were separate and distinct things; though some faculties were higher than others. The highest was the reasoning power to be developed by appropriate discipline in mathematics, logical disputations, and the languages; but the faculty upon which all the others depended, and upon the successful development of which depended the success of the education, was the memory. Discipline of the memory then took precedence above all other exercises. The best training for the memory was afforded by the mastery of

material which had no inherent interest for the child."[236]

Opposed to the doctrine of *Formal* Discipline stands the theory of *Specific* Discipline, which asserts that the power gained in any particular kind of exercise can not be transferred from one activity to another, save in so far as the two have elements in common. "Mental power is of two kinds, specific and generic. . . . In other words, the power that is generated in any activity can be fully used again in the same kind of activity, but only partly used in other kinds—the measure of the difference being the relative unlikeness of the two activities."[237]

This doctrine of Specific Discipline may be regarded, in reality, as a nineteenth century development of the theory of formal discipline, and growing out of the conflict between the protagonists of a "scientific education" and the advocates of the old traditional classical and mathematical education. The claims of the sciences were based on the superior specific discipline derived from their study and on the intrinsic value of their content. Besides, it was urged, as a general discipline they were fully equal, if not superior, to the classics and mathematics.

Youmans expresses the relation between the three phases through which the disciplinary theory has passed, thus: "The ancients employed the useless fact A for disciplinary purposes, and ignored the useful fact B. The adherents of the current theory (of Formal Discipline) propose to learn first the useless fact A to get the discipline necessary to acquire the useful fact B; while a rational system ignores useless A and attacks B at once, making it serve both for knowledge and discipline."[238] If we substitute *less useful* for "useless," we may regard this as a fair presentation of the facts.

The theories of formal and of specific discipline agree

[236]Text-Book in the History of Education, pp. 505, 506, 567, 568.
[237]Hinsdale, Studies in Education, pp. 47, 73.
[238]The Culture Demanded by Modern Life, p. 23.

in this, that education is largely a matter of training and discipline, having for object the development of power and habits, physical, moral, and mental. The essential difference is that the theory of Formal Discipline asserts the possibility of complete transference of training effect from one activity to another, and that the study of a few subjects well chosen for the purpose will serve as an adequate preparation for any calling in life. The specific disciplinarian, on the other hand, admits a transfer of energy only to the extent in which the new activity is similar in ideals, in method, in matter, or some other elements, and that, therefore, specific training upon directly useful content subjects is the logical preparation for a specific calling in life.

With the field thus cleared, let us examine Locke's position with regard to the doctrine of Formal Discipline as defined above.

That Locke is a disciplinarian seems to be so obvious even to a casual reader of his *Thoughts* and the *Conduct,* that the citation of specific passages in support of the assertion may be regarded as superfluous.

His "hardening" process, whereby he proposes to inure the body to inevitable vicissitudes and discomforts, is a strict physical discipline. Virtue is to be ingrained into the young by a rational discipline, that begins in the cradle and continues through life. In the training of the intellect there is constant insistence on the importance of forming habits of reflection and ways of reasoning.

But though Locke has been repeatedly classified as a formal disciplinarian, it is our purpose to make a brief examination of the reasons therefor, and to test their sufficiency. Monroe, although not very explicit, seems to rank Locke among the formal disciplinarians. "The one fundamental thing," he says, "that makes Locke a representative of the disciplinary education throughout is his idea of the human mind as a mere blank to begin

with, which has its virtues and powers worked into it from the outside through the formation of habits."[239] Here Monroe refers, of course, to the figure of the *tabula rasa,* interpreting that metaphor as a denial of native mental energy. But the passivity resulting from the absence of all innate power, to begin with, would furnish no ground for discipline.

Furthermore, that Locke did not intend to deny the innate powers of the soul is made clear by his own comment upon this expression. . . . "I think nobody . . . who ever read my book could doubt that I spoke only of innate ideas; for my subject was the understanding, and not of innate powers."[240]

This alone would be sufficient evidence to show that he admits the existence of innate powers, but, in the *Conduct,* he expresses himself more positively: "We are born," he says, "with faculties and powers capable almost of anything."[241]

When Locke refers to inborn powers of the mind as faculties, he seems to foresee the possibility of being interpreted as holding the theory of distinctly existing and independently operating principles. He forestalls such a misunderstanding when he says: "The ordinary way of speaking, is, that the understanding and will are two faculties of the mind; a word proper enough, if it be used as all words should be, so as not to breed any confusion in men's thoughts, by being supposed (as I suspect it has been) to stand for some real beings in the soul that performed those actions of understanding and volition . . . yet, I suspect, I say, that this way of speaking of faculties has misled many into a confused notion of so many distinct agents in us, which had their several provinces and authorities, and did command, obey and perform several

[239]Op. cit., p. 513.
[240]*Essay,* Fraser's Edition, Introduction, p. xliv.
[241]Sec. 4.

actions, as so many distinct beings; which has been no small occasion of wrangling, obscurity, and uncertainty in questions relating to them.''[242] ''If it be reasonable to suppose, and talk of faculties, as distinct beings that can act . . . it is fit that we should make a speaking faculty, and a walking faculty, and a dancing faculty by which those actions are produced, which are but several modes of motion.''[243] Hence, as far as Aristotle's ''faculty'' psychology is concerned in the theory of formal discipline, Locke had no part in it.

Nowhere is Locke more clear and emphatic on the subject of discipline, than in the *Conduct,* and here particularly when he discusses the value of mathematics. He says, ''Would you have a man write or paint, dance or fence well, or perform any other operation dexterously and with ease, let him have ever so much vigour and activity, suppleness and address naturally, yet nobody expects this from him unless he has been used to it, and has employed time and pains in fashioning and forming his hand or outward parts to these motions. Just so it is in the mind; would you have a man reason well, you must use him to it betimes, exercise his mind in observing the connection of ideas and following them in train. Nothing does this better than mathematics, which therefore I think should be taught all those who have the time and opportunity, not so much to make them mathematicians as to make them reasonable creatures.''[244] ''I have mentioned mathematics as a way to settle in the mind a habit of reasoning closely, and in train; not that I think it necessary that all men should be deep mathematicians, but that having got the way of reasoning, every single argument should be managed as a mathematical demonstration, the connection and dependence of ideas should be

[242] *Essay,* Bk. II., c. 21, 6.
[243] Bk. II., c. 21, 17.
[244] Sec. 7.

followed till the mind is brought to the source on which it bottoms and observes the coherence all along . . .''[245]

These passages from the *Conduct* seem more favorable to the doctrine of Formal Discipline than, perhaps, any other utterances of Locke. Yet it will be observed that what Locke hopes from the study of mathematics is not a mental power universally applicable to any and every situation, but rather the method, *the way of reasoning,* and ''the habit of reasoning closely and in train.'' He declares that the fault which ''stops or misleads men in their knowledge'' is ''a custom of taking up with principles that are not self-evident and very often not so much as true. . . . The reason why they do not make use of better and surer principles, is because they cannot. . . . Few men are from their youth accustomed to strict reasoning, and to trace the dependence of any truth in a long line of consequences to its remote principles, and to observe its connections. . . . Nay, the most of men are so wholly strangers to this, that they do not so much as perceive the want of it.''[246] Now, he argues, the study of mathematics will, in the first place, awaken a man to his own deficiencies, and ''would take off that presumption that most men have of themselves in this part.'' ''Secondly, the study of mathematics would show them the necessity there is, in reasoning, to separate all the distinct ideas, and see the habitudes that all those concerned in the present enquiry have to one another.'' And, he adds, ''There is another no less useful habit to be got by an application to mathematical demonstrations, and that is, of using the mind to a long train of consequence.''[247]

Locke wishes to teach the art of reasoning. He does not, however, believe that this art can be taught ade-

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[245] Ibid.
[246] *Conduct,* Sec. 7.
[247] Ibid.

quately by the study of logic, but that it must be inculcated by practice. He regards mathematics as the easiest and the most obvious kind of reasoning,[248] and that this subject is, therefore, best suited for an object-lesson in dialectics. That he does not regard the training in mathematics as an all sufficient and universal discipline is made plain in his own words: "In *ways* of reasoning which men have not been used to, he that will observe the conclusions they take up must be satisfied they are not at all rational."[249] "The mistake is, that he that is found reasonable in one thing is concluded to be so in all."[250] "It is true that he that reasons well in any one thing, has a mind naturally capable of reasoning well in others, and to the same degree of strength and clearness, and possibly much greater, had his understanding been so employed. But it is as true that he, who can reason well today about one sort of matters, cannot at all reason today about others, though perhaps a year hence he may."[251] Hence, he desires that the young pupil be introduced into many lines of study, "to open the door, that he may look in, and as it were begin an acquaintance," and thus "to give him some little taste of what his own industry must perfect."[252]

In the *Conduct* Locke enlarges upon this idea, making quite clear that he seeks *specific* disciplines. He says, "The end and use of a little insight in those parts of knowledge, which are not a man's proper business, is to accustom our minds to all sorts of ideas and the proper ways of examining their habitudes and relations. This gives the mind a freedom and the exercising the understanding in the several ways of enquiry and reasoning, which the most skilful have made use of, teaches the mind

[248] Cf. *Thoughts*, Sec. 180.
[249] *Conduct*, Sec. 6.
[250] Ibid.
[251] Ibid.
[252] Cf. *Thoughts*, Sec. 94.

sagacity and wariness, a suppleness to apply itself more closely and dexterously to the bents and turns of the matter in all its researches. Besides, the universal taste of all sciences, with an indifferency before the mind is possessed with any one particular and grown into love and admiration of what is made its darling, will prevent another evil very commonly observed in those who have from the beginning been seasoned only by one part of knowledge. Let a man be given up to the contemplation of one sort of knowledge and that will become everything. The mind will take such a tincture from a familiarity with that object, that everything else, how remote soever, will be brought under the same view. . . . It is no small consequence to keep the mind from such a possession which I think is best done by giving it a fair and equal view of the whole intellectual world, wherein it may see the order, rank, and beauty of the whole, and give a just allowance to the distinct province of the several sciences in due order and usefulness of each of them. . . . If men are for a long time accustomed only to one sort of method of thoughts, their minds grow stiff in it, and do not readily turn to another . . .''[253]

That Locke believes a many-sided scholarship necessary to a complete development of the reasoning power is likewise implied in this statement: ''It will be objected, that to manage the understanding as I propose, would require every man to be a scholar, and to be furnished with all the materials of knowledge, and exercised in *all the ways* of reasoning. To which I answer that it is a shame for those that have time and the means to attain knowledge, to want any helps or assistance for the improvement of their understandings that are to be got, and to such I would be thought here chiefly to speak.'' [254] Had he held to the doctrine of Formal Discipline, he

[253] Sec. 19.
[254] Ibid. Sec. 7.

would hardly have missed the opportunity here given him to assert the adequacy of the training given by one or two subjects. With Locke the learning process is neither sufficient in itself nor more important than the thing learned. He insists on content: Our reason "perfectly fails us where our ideas fail. . . . Wherever we have no ideas, our reasoning stops, and we are at an end of our reckoning."[255]

One more proof that Locke was not a believer in the doctrine of Formal Discipline is found in the passage of the *Thoughts* cited above (Chapter V), in which he refers to the futility of exercising the memory for the purpose of general development. "The learning of pages of Latin by heart," he adds by way of illustration, "no more fits the memory for retention of anything else, than the graving of one sentence in lead makes it more capable of retaining any other characters."[256] We have shown in Chapter V, that here Locke admits less transfer of practice effect than the results of careful observation and experiment have proven to exist.

Lastly nowhere do we find Locke disposed to retain in the curriculum any subject that has no longer any intrinsic value for the student. Latin, grammar, and rhetoric, are set aside whenever it becomes evident that the pupil will not need them directly, and no heed is given to whatever disciplinary value they possess.[257] Whatever is "useful or necessary for a young gentleman" is the constantly repeated criterion of educational values. Thus we read: "Since it cannot be hoped he should have time and strength to learn all things, most pains should be taken about that which is most necessary; and that principally looked after which will be of most and frequentest use to him in the world."[258] "Can there be anything

[255] *Essay*, Bk. IV., c. 179.
[256] *Thoughts*, Sec. 176.
[257] Cf. *Thoughts*, Secs. 164, 165.
[258] Ibid. Sec. 94.

more ridiculous than that a father should waste his own money and his son's time in setting him to learn the Roman language, when at the same time he designs him for a trade?"[259] Again, "I think the first six books of Euclid enough to be taught. For I am in some doubt, whether more to a man of business be necessary or useful."[260]

The thought that a subject of study has disciplinary value, because it is hard or difficult, does not appeal to Locke: "Truths," he says, "are not the better nor the worse for their obviousness or difficulty, but their value is to be measured by their usefulness and tendency."[261]

Summary

We conclude, therefore, that though Locke was a Disciplinarian, his theory, taken either in its totality or in any of its parts, does not warrant our classifying him as a *formal* disciplinarian. His discipline is *specific*. We base our findings, (1) on his rejection of the theory of universal and undiminished transfer of training effect; (2) on his repudiation of the "faculty" psychology of Aristotle; (3) on his rejection of the idea that what is hard or difficult has special disciplinary value; (4) on his emphasis upon the useful content of the subject of study; (5) on his insistence upon a curriculum embracing a wide range of subjects; and (6) on his recognition of the truth that the ability to reason upon any subject demands specific knowledge of the facts and of the specific technique involved.

Though Locke's applications of it are not always beyond criticism, it is, nevertheless, true that his views on education foreshadowed the theory of specific discipline, which was not definitely formulated until the nineteenth century.

[259] Ibid. Sec. 164.
[260] Ibid. Sec. 181.
[261] Conduct, Sec. 25.

CHAPTER VII

A GENERAL CRITICISM AND APPRECIATION OF LOCKE'S THEORY OF EDUCATION TAKEN AS A WHOLE

It is naturally expected that the acclaimed founder of the new psychology,[262] whose entire domain treats of the origin and elaboration of ideas, would build his pedagogy upon this foundation. His *Thoughts,* however, do not wholly satisfy this expectation. These were, as we are aware, originally in the form of letters, written by Locke while in Holland, and before he had given his philosophy to the world. It would have been hardly proper to refer his friend, to whom these letters were addressed, to the yet unpublished psychological investigations. Indeed, Locke never entertained such an idea. His friend, Mr. Clarke, of Chipley, merely expected from him the advice of an experienced and intelligent man, and Locke would have deemed it presumption, on his part, had he, instead, placed before him a philosophically deduced pedagogy.

Locke's theory on education, as supplemented by the *Conduct of the Human Understanding,* may be deemed as a kind of revolt against the existing method of education prevalent in his time. Although tinged with humanistic ideas, he strongly opposed the methods of the humanists and advocated more rational procedures.

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[262]Historical: Locke has been acclaimed by many authors as the first writer on modern empirical psychology. We find that this statement is not entirely correct. We believe that Vives, not Locke, was the father of modern empirical psychology. We have but to name one outstanding theme on which that writer has anticipated later enquiry, the theory of Association of Ideas. This theory is laid down with a clearness, which has won the high recognition of those interested in the history of psychology. Sir William Hamilton says, "Vives' observations comprise, in brief, nearly all of principal moment that has been said on this subject, either before or since his time."—Watson, Vives On Education, Introduction, p. xcv.

Reason, he claimed, must prevail, and everything not really useful for the future avocation in life must be put aside. He was a great admirer of Montaigne and follower of Comenius. Common sense is the predominant characteristic of his theory and utilitarianism is its keynote.

In the *Conduct,* Locke gives evidence of skill in his treatment of logical questions. He lays particular stress on what may be styled the moral causes of false reasoning. These he ascribes to prejudice, haste, mental indolence, undue regard for authority, love of antiquity or novelty, self-sufficiency, despondency, and the various conditions of mind, which are quite as effective in blocking the way to truth as any sophisms, however clever, which others attempt to impose upon us.

When viewed in relation to the *Essay,* the *Conduct* may be looked upon as a natural and practical appendix. In the latter, he enquires into the constitution and history of the human mind, while in the former he attempts to suggest rules and cautions for guiding or controlling its operations in search for knowledge. Discipline appears to be its touchstone.

The philosophy of *Enlightenment* which prevailed in the eighteenth century, we will notice, concerned itself with problems of an exceedingly practical interest, which have exerted an influence of wide extent upon the character and life of all classes of society. While the practical tendencies of all speculative thought inevitably appear in the opinions and customs of a general public far removed from their sources, it is particularly true of the philosophy of the *Enlightenment,* that its influence had no small part in shaping the popular point of view concerning the moral, religious, and political convictions of that age.

Green called Locke's *Essay,* the "Philosopher's Bible." It is in the *Essay* that we may trace these three

practical influences, and describe the main tendency of each as that of *Utilitarianism,* of *Deism,* and of *Individualism.* Consequently, it is in Locke's philosophy that we will find the beginnings of these practical influences as well as of their theoretical speculations. Hence, all the writings, whether educational, psychological, moral, political, or even economic, have been impregnated with these influences for the past several centuries, and thus our theories in religion, morals, and polity have been tinctured with these false principles and have been accepted as the acme of true, progressive enlightenment.

Locke's personal experience in school biased his mind against the educational processes as well as the school curricula of his century. He conceived an intense aversion for the current methods, and, now, that he had attained to independence of thought and views on education, he published his *Thoughts* and *Conduct* which contained his ideas on that subject. It is quite natural, therefore, that he should boldly inveigh against what he considered abuses, and formulate a system which he founded upon common sense. It appears, beyond a doubt, that he was imbued with the sense-realism of Rabelais, Montaigne, and Comenius, and accordingly elaborated his educative processes to harmonize with their views. Whatever in the current system did not agree with his own independent ideas, he condemned. As we have indicated above, Locke's system was individualistic, naturalistic, and utilitarian. He evidently did not take sufficient account of the historical development of education, or make due allowance for social and political changes. In our system of education we have to adjust the child to his environments, and teach him how to overcome difficulties and meet the actual conditions as presented in his social and civic life. This important phase of education Locke seems not to have emphasized as we might have expected from him. It is true he speaks about introduc-

ing the child into company and urges the tutor to have him trained thereto. But it is not in the light of our modern requirements of adjustments to social conditions and environments.

In his physical training, Locke has left us some excellent suggestions about the value and preservation of health. As a physician, he fully realized the importance and significance of Juvenal's dictum, *a sound mind in a sound body.* His prescriptions are wise in many instances and in accord with modern science. His ideas concerning "hard-bodice" and "strait-clothes" are full of wisdom, and, if followed, would be productive of much good and prevent many evils resulting from such causes. The proper care of our body, he holds of primary importance, lest we should "rob God of as much service, and our neighbor of all that help, which, in a state of health, with moderate knowledge, we might have been able to perform."[263]

[263]Of Study.—Historical.—Physical training was insisted upon by the earlier Humanists. Vittorino da Feltre (1378—1446) devised systematic methods of physical instruction. Among outdoor games ball-play in its various forms was most prized, next to that, of running and jumping. He was the first to teach gymnastics as an art. (Cf. Woodward, Vittorino da Feltre, Cambridge, 1911.)

Erasmus (1466—1536), like Locke, had learned from his own experience the importance of health as a condition of efficient intellectual life. His view of the relation of mind and body was derived from Aristotle (*De Generatione*). He enters into some detail. Too much or too rich food, spices, wine, are all forbidden; the mind, not less than the body, suffers from such indulgences. Too much sleep is equally injurious. Exercise, he expressly urges, should be free and spontaneous. Dress should always allow such activity. Girls suffer more than boys from custom and from parental vanity. Smart, cramping dress, with sleeves and trains and collars not only hampers them physically, but begets childish conceit. Yet the "hardening" system by exposure—thin dress, bare legs, no hat, has a critic in Erasmus. Baths are good in moderation. This sounds like Locke. (Cf. Woodward, Desiderius Erasmus concerning the Aim and Methods of Education, p. 87.)

Vives (1492-1540) says the boys must exercise their bodies frequently, for that age demands growth and development of the strength which has been acquired, so that they may be able to accomplish further work, otherwise they are exhausted in a very short time, and then become good for nothing. There are games which combine honor with pleasure, such as throwing the javelin, playing ball or running. The aim of such games is to promote the growth of the

Locke understood the world and appreciated its dangers to youth. He deplored vice and the low state of morals of his day. Hence, he strongly insisted that the tutor should teach the pupil virtue and form in him permanently fixed habits. The ideal tutor, according to Locke's estimation, should be a man of knowledge, experience, and possessed of an unblemished character. From a practical viewpoint, the qualities of mind and heart demanded of the tutor were to be of a high order. His estimate is not overdrawn, although Hallam thinks Locke's ideal tutor is an impossibility. However noble Locke wishes the tutor to be, this ideal would have been ennobled still more, had he required the Christian qualities, for these would raise the educator above worldly considerations and actuate him to labor with supernatural and truly Apostolic zeal and disinterestedness.

Religion was not wholly shelved in Locke's scheme, but we cannot admit that its practice, as inculcated according to his theory, would ever make Christian men and women. There was lacking that sublime faith and ardent charity, the very bed-rock of religion. His was a convenient religion, one of utility, and of external show. The sublime truths, as taught by Christ, the Model Teacher, found no place in Locke's plan. If the pupil followed his teaching of religion, it would lead, in its last analysis, to rationalism, materialism, if not to scepticism.

Plato and Aristotle taught the necessity of virtue, but from a merely natural standpoint. Locke's ideas concerning virtue are more natural than supernatural. It was a convenient garment to put on to win the esteem and praise of men. His conception was purely natural

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body. The whole care of health is directed to make the mind vigorous and to attain what Cicero most desired from the Gods, *mens sana in corpore sano;* then to strengthen and refresh the mind so that it may be fit for its daily work. Thus we see that Vives expressed almost the same thought concerning health as Locke did two centuries later. (Cf. Watson, Vives; On Education, p. 121.)

and certainly far removed from the Christian ideal and practice. The supernatural element was wholly eliminated and had no place in his moral system. The true cornerstone was wanting. Merely to mention God and the Decalogue, with the counsel of saying a short morning and evening prayer is not religion, for there is no inspiring, living faith and quickening charity, two essentials to make it active and meritorious. Virtue without religion is an anomaly. Moreover, virtue, such as taught by Locke, may make a polished gentleman, but not a true Christian gentleman. It is noticeable that in Locke's moral teaching, there is no mention of a trained Christian conscience nor its functions, an element most important to correct Christian living. To shine in society and to be pleasing and agreeable to men, appears to be the sole motive of conduct. The verdict of society is to act as guide and mentor.

Locke, indeed, thinks of virtue, wisdom, and breeding, as things inculcated and worked into youth. But thinkers, such as Pestalozzi and Froebel since Locke's time, and, indeed, Comenius before his time, have held that the seeds of virtue and wisdom are implanted in us by Nature, and that these must be developed under the "benevolent superintendence" of parents and educators. If we take up this standpoint, there seems far too much artifice in many of Locke's proposals. They even at times verge on "white lies" or "pious frauds," as did those of Rousseau, who in this was probably Locke's disciple.[264]

According to Hibbin, "Locke's theory of Morals is the logical outcome of his psychology of the senses. If all the complex ideas of our knowledge are traceable at the last analysis to primary sensations, then the pleasure or pain tone of these sensations will eventually colour and determine the nature of those particular complex

[264] Cf. Quick, *Thoughts*, Introduction, p. lv.

ideas which we call moral. The distinction between good and evil from this point of view is one which is based upon the more primitive distinction between pleasure and pain."[265]

Again, "the mingled elements of Locke's moral philosophy are distinctly separated by most of his followers. His utilitarianism resting upon the basis of a sensualistic psychology of pleasure and pain is adopted; his idea of a body of moral principles mathematically demonstrable is ignored; and his theological account of our supreme moral incentives is rejected. Whether it be possible to harmonize the various phases of his ethical system or not, it at least must be conceded by the most valiant champion of Locke that the utilitarian aspect of his theory of morals is the one which profoundly affected the various currents of thought in the eighteenth century."[266]

In our examination of Locke's intellectual training, we pointed out some of the defects of his plan. It is obvious to any serious student of the *Thoughts* that Locke is rather incomplete in parts as well as disappointing in others. He is more particular in his physical and moral training. Here he holds it as a principle that the tutor should observe the influence which every action of the child will have on his mind and the habit it will strengthen in him. It is true that he tells us that learning is the least part of education, and hence it is that he does not show us what effect any particular study has on the child's mind, but rather whether the knowledge or skill will or will not be useful to him as a gentleman. We naturally expect that the philosopher who seems to have made a deep study of the human understanding should have left us more precise information

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[265]The Philosophy of Enlightenment, p. 254, for Locke's particular viewpoint, cf. Essay, Bk. II, c. 20, 2, 3.

[266]Ibid. op., cit., pp. 258, 259.

as to the *how* various intellectual exercises influence the mind. There is, however, one study, namely, mathematics, in which he traces some of the effects and benefits on the mind, but he seems to have overlooked it in the other branches, and merely considers the utility of such knowledge to the young gentleman, and how he may acquire the best intellectual training without too much labor. This we think an oversight and by such neglect he has done himself an injustice. The following excerpts will show his carelessness in this important part of his educational process.

Thus, " 'Tis matter of astonishment," Locke says, "that men of quality and parts should suffer themselves to be so far misled by customs and implicit faith. Reason, if consulted with, would advise, that their children's time should be spent in acquiring what be *useful* to them, when they come to be men, rather than that their heads should be stuffed with a deal of trash, a great part whereof they usually never do ('tis certain they need to) think on again as long as they live; and so much of it does stick by them they are only the worse for."[267] And so again, speaking of verse-making, he says, "I know not what reason a father can have to wish his son a poet, who does not desire him *to bid defiance to all other callings and business;* which is not yet the worst of the case; for, if he prove a successful rhymer, and gets once the reputation of a wit, I desire it to be considered what company and places he is likely to spend his time in, nay, and estate too; for it is very seldom seen that anyone discovers *mines of gold or silver in Parnassus.* 'Tis a pleasant air, but a barren soil."[268]

In another passage he distinctly limits utility in education to its bearing on the future profession or trade of the pupil, that is, he scorns the idea of any education of

[267] *Thoughts,* Sec. 94.
[268] Sec. 174.

the intellect, simply as such. "Can there be anything more ridiculous," he asks, "than that a father should waste his money, and his son's time, in setting him *to learn the Roman language,* wherein he, having no use of Latin, fails not to forget that little which he brought from school, and which 'tis ten to one he abhors for the ill-usage it procured him? Could it be believed, unless we had everywhere amongst us examples of it, that a child should be forced to learn the rudiments of a language, which *he is never to use in the course of life that he is designed to,* and neglect all the while the writing a good hand, and casting accounts, which are of great advantage in all conditions of life, and to most trades indispensably necessary?"[269]

Concerning these passages, Cardinal Newman thus comments: "Nothing of course can be more absurd than to neglect in education those matters which are necessary for a boy's future calling; but the tone of Locke's remarks evidently implies more than this, and is condemnatory of any teaching which tends to the general cultivation of the mind."[270]

The whole aim of Locke's pedagogy is to qualify the pupil to use his reason and to subject all his actions to its guidance or control. Hence, it is in line with the rationalistic systems which flourished, one after another, in the seventeenth century. Rationalistic pedagogy received an effective impulse from Descartes; it is, therefore, not at all surprising that Locke, whose philosophical speculations proceed from that French philosopher, should bring his pedagogical theories in harmony with those French educators whose doctrines are influenced by Descartes. He comes closest to Claude Fleury, whose book, *Sur le choix et la méthode d'étude,* appeared a few years prior to Locke's *Thoughts concerning Education.*

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[269]Sec. 164.

[270]Idea of a University, Discourse VII., p. 160, 6th ed. 1886.

Locke wrote his pedagogical work in Holland, as was noted above, where French literature had long enjoyed the privilege of an assured and time honored asylum. There is nothing more probable than that, in Holland, Locke became acquainted with the work of Fleury. Whilst it is true that he quotes but seldom and ordinarily only from memory, he embodies, at least, one passage of considerable length from La Bruyère in his *Thoughts*. Then, too, the remark that the French do so much for their mother tongue,[271] points to this connection.

Furthermore, we are aware that Locke was well acquainted with Montaigne, though he did not particularly cultivate a warm friendship with him, and that he busied himself extensively, with Pierre Nicole, the Port-Royal moralist. And, lastly, his *Essay* appeared first in French excerpts. As a matter of fact, for all the important points in Locke's pedagogy, there are references to Fleury and other representatives of French rationalistic pedagogy.

Then, again, a striking care for the training of the physical man is peculiar to the adherents of this tendency. In man, as in all creation, everything is arranged in harmony with reason. This harmony, which the Creator expresses in all his works, can not be suddenly denied in the human organism. Hence, we cannot accept any fundamental contradiction or opposition between soul and body; if the body suffers, the soul, too, suffers, and this is all the more true, since the emotions of pleasure or pain determine all men's actions. These theories are connected with the ancient doctrines of *spiritus animales*. The French rationalists, as well as Locke, seem to hold this theory in honor. Locke's psychology should have led him away from this unscientific theory; but, in his *Thoughts*, it plays no part. Since pleasure and pain are the earliest, the most powerful, and the ever present stimuli to human action, Fleury teaches, among other

[271] Vide, Sec. 189.

things, that we should be careful during the first years not to associate the idea of the rod with that of books, in such a way that the child thinks of study only with dread. Locke elaborates this thought again and again till it becomes monotonous. Indeed, he goes so far in the direction, that, in one instance, he reverses the relations, and insists on making a task out of the game to which the children abandon themselves too passionately, and keeping them at it to the point where it becomes painful.[272] In his *Essay*, we come across this passage, "Many children imputing the pain they endured at school to their books they were corrected for, so join those ideas together, that a book becomes their aversion, and they are never reconciled to the study and use of them all their lives after; and thus reading becomes a torment to them, which otherwise possibly they might have made the great pleasure of their lives."[273] This sounds literally like Fleury.

Similarly, the tendency toward the useful in life, peculiar to the rationalists and the low esteem in which the classical studies and aesthetic activities were held by all the rationalists of the seventeenth century, are found in Locke, and hence are more pardonable on that account.

"I imagine," says Laurie, "all men who have thought about educational principles and aims, must concur in feeling that instruction given on Locke's plan as contained in the *Thoughts,* would fail to give discipline or power to the intelligence. This would not be a matter to grieve over were it not that we can not separate the intellectual and moral nature, and that the discipline of the intellect is a discipline, and indirectly a training to virtue.

"In the *Conduct,* however, we find the necessary supplement to the *Thoughts* on this point and others, for it is in fact a treatise on mental discipline: it is to this valuable Essay that we must go, if we wish to know what

[272] Vide, Secs. 128, 129.
[273] Bk., II., c. xxxiii, 15.

Locke's idea was of the proper aim of education as regards the *intellect*. He there shows what a sound intellect and habit of mind are, and what an unsound. His characteristics of the former constitute his educational ideal as regards intellect, his remarks on the latter, point out what we have to guard against and correct both in ourselves and in those we educate."[274]

Locke is very insistent on methodical procedure in the pursuit of knowledge. In the *Conduct* he says, "Things, that in a remote and confused view seem very obscure, must be approached by gentle and regular steps; and what is most visible, easy and obvious in them first considered. Reduce them into their distinct parts; and then in their due order bring all that should be known concerning every one of those parts into plain and simple questions; and then what was thought obscure, perplexed, and too hard for our weak parts, will lay itself open to the understanding in a fair view, and let the mind into that which before it was awed with, and kept at a distance from, as wholly mysterious."[275] He insists upon gradation in study. "The surest way for a learner in this," he says, "as in all other cases, is not to advance by jumps and large strides; let that which he sets himself to learn next be indeed the next; *i. e.*, as nearly conjoined with what he knows already as is possible; let it be distinct but not remote from it: let it be as little at once as may be, that its advances may be clear and sure. All the ground that it gets this way it will hold. This distinct and gradual growth in knowledge is firm and sure; it carries its own light with it in every step of its progression in an easy and orderly train; than which there is nothing of more use to the understanding. And though this perhaps may seem a very slow and lingering way to knowledge; yet I dare confidently affirm, that whoever will try it in himself, or any one he will teach, shall find the advances

[274] Educational Opinion from the Renaissance, p. 225.
[275] Sec. 39.

greater in this method, than they would in the same space of time have been in any other he could have taken.''[276] In the concluding words of the same section, he urges that we proceed little by little and to take the new out of the old: ''I, therefore, take the liberty to repeat here again what I have said elsewhere, that, in learning anything, as little should be proposed the mind at once as is possible; and, that being understood and fully mastered, to proceed to the next adjoining part yet unknown, simple, unperplexed proposition belonging to the matter in hand, and tending to the clearing what is principally designed.''[277]

Hence, to acquire knowledge, Locke insists upon discipline of the intellect. He holds that discipline is to be obtained by the analysis of words as the vehicles of things, the analysis and reconstruction in our own minds of the reasonings which we encounter in literature and by the exercise of our own reasoning.

And concerning the analysis of words, Locke says: ''The sure and only way to get true knowledge, is to form in our minds clear and settled notions of things, with names annexed to those determined ideas. These we are to consider, with their several relations and habitudes, and not amuse ourselves with floating names, and words of indetermined signification, which we can use in general senses to serve a turn.''[278]

Again, the separation from metaphysics, and the experimental origin assigned to mental development and content in these and similar passages of the *Essay,* became the basis of the modern study of psychology, which may practically be said to date from that of the publication of that work in 1690; the comparative method, which plays a conspicuous part in the study of today, is anticipated in principle by the casual, though frequent

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[276]Ibid.
[277]Ibid.
[278]*Conduct,* Sec. 15. Cf. also, Sec. 29, and *Essay,* Bk. III., c. 1, 3.

references which Locke there makes to the mental processes of children.[279] Although Locke is careful to assign two "fountains" to experience—namely, sensation and reflection—the stress of his exposition falls to excess upon the first named, and it is, therefore, not surprising that he is sometimes regarded as the originator of a sensationalist, rather than an experimental, psychology. The misinterpretation is the easier on account of the confusion between ideas, processes, and states for which Locke is himself responsible; the later eighteenth-century educational theories for the most part assume a purely sensationalist origin for the whole of mental life.

Locke's discussion of the problem of knowledge, owing to its fundamental incompleteness, leads straight to the conclusion that the problem is unanswerable, that certainty is unattainable, as far as objective reality is concerned, and that scepticism on all subjects is the only consistent position open to the philosopher. The *Essay* does not, indeed, go so far as this, although a sceptical temper is not without illustration in its pages. "But whilst we are destitute of senses acute enough to discover the minute particles of bodies, and to give us ideas of their mechanical affections, we must be content to be ignorant of their properties and ways of operation; nor can we be assured about them any further, than some few trials we make are able to reach. But whether they will succeed again another time, we cannot be certain. This hinders our certain knowledge of universal truths concerning natural bodies; and our reason carries us herein very little beyond particular matter of fact.

"And, therefore, I am apt to doubt, that how far soever human industry may advance useful and experimental philosophy in physical things, scientifical will still be out of our reach."[280]

[279]Note. The reader will also note the frequent occurrence in *Thoughts* of anecdotes of children, e. g., Secs. 78, 166, 178, of savages and idiots.

[280]Bk. IV., c. 3, 25; Cf. *Thoughts*, Secs. 190, 196.

Again, a combination of the experimental psychology with philanthropic sentiment and the belief in man's essential rationality was bound to issue in schemes of educational change; if all men are initially equal (one *tabula rasa* is like all others) and subsequent differences are due solely to experience, then, education, a beneficent form of education, is capable of affecting unlimited reform in those submitted to it.

Two of the most remarkable educational treatises of the eighteenth century, Rousseau's *Emile* (1762) and the *Essai d'Education Nationale* (1763) of La Chalolaire, adopt Locke's teaching on the genesis of mental content and apply it to their theme. The differences between the educational doctrines of Locke and Pestalozzi are greater than the agreements; but the latter's most distinctive principle of method is merely an explicit statement of Locke's implied canon, that teaching should be based on first-hand experience. All these thinkers emphasized the truth that educational purposes and processes must wait on mental development, and not on aims and methods foreign to it. In Locke's philosophical teaching is found the source of the principles so frequently repeated since his time, that the sense-organs of children should be exercised in school, that learners should follow the path marked by discoverers, and that they should be habituated to objects and to processes rather than names and words.[281]

We will conclude with Vives: "I would not desire that any one should yield his opinion to mine. . . . If you think, friends, that I seem to offer right judgments, see well that you give your adherence to them, because they are true, not because they are mine . . . you who seek the truth, make your stand, wherever you think she is."[282]

[281] Cf. Adamson, Locke and his Educational Writings.
[282] Watson's Vives: On Education, Introduction, p. clvii.

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